US010750883B2

(12) **United States Patent**
Reifert

(10) **Patent No.: US 10,750,883 B2**
(45) **Date of Patent: Aug. 25, 2020**

(54) **SELF-STANDING MERCHANDISE FRAME**

(71) Applicant: **FRAMEWORKS, LLC**, Muscatine, IA (US)

(72) Inventor: **Kyle Reifert**, Muscatine, IA (US)

(73) Assignee: **FRAMEWORKS, LLC**, Muscatine, IA (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **16/397,734**

(22) Filed: **Apr. 29, 2019**

(65) **Prior Publication Data**

US 2019/0357700 A1 Nov. 28, 2019

Related U.S. Application Data

(60) Provisional application No. 62/663,692, filed on Apr. 27, 2018.

(51) **Int. Cl.**

A47F 5/00	(2006.01)
A47F 5/01	(2006.01)
A47F 5/13	(2006.01)
A47B 57/06	(2006.01)

(52) **U.S. Cl.**

CPC ***A47F 5/0031*** (2013.01); ***A47F 5/01*** (2013.01); ***A47F 5/13*** (2013.01); *A47B 57/06* (2013.01)

(58) **Field of Classification Search**

CPC .. A47F 5/0031; A47F 5/01; A47F 5/14; A47F 5/13; A47B 57/06; A47B 57/16; A47B 57/46

USPC 211/181.1, 187, 188, 90.01, 90.03, 90.02

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

846,359	A *	3/1907	Sparmaker	A47B 11/00 108/94
1,752,985	A *	4/1930	Huffman	A47F 5/13 211/106
2,447,704	A *	8/1948	Kline	A47B 57/16 108/110
2,802,576	A *	8/1957	Kelling	A47F 5/01 211/59.1
2,864,512	A *	12/1958	Hoose	A47F 5/13 108/181
D186,254	S *	9/1959	Tirlet	D6/675.2

(Continued)

FOREIGN PATENT DOCUMENTS

AU	2005203373	A1	2/2006
DE	202006006164	U1	11/2006
EP	1541066	A1	6/2005

OTHER PUBLICATIONS

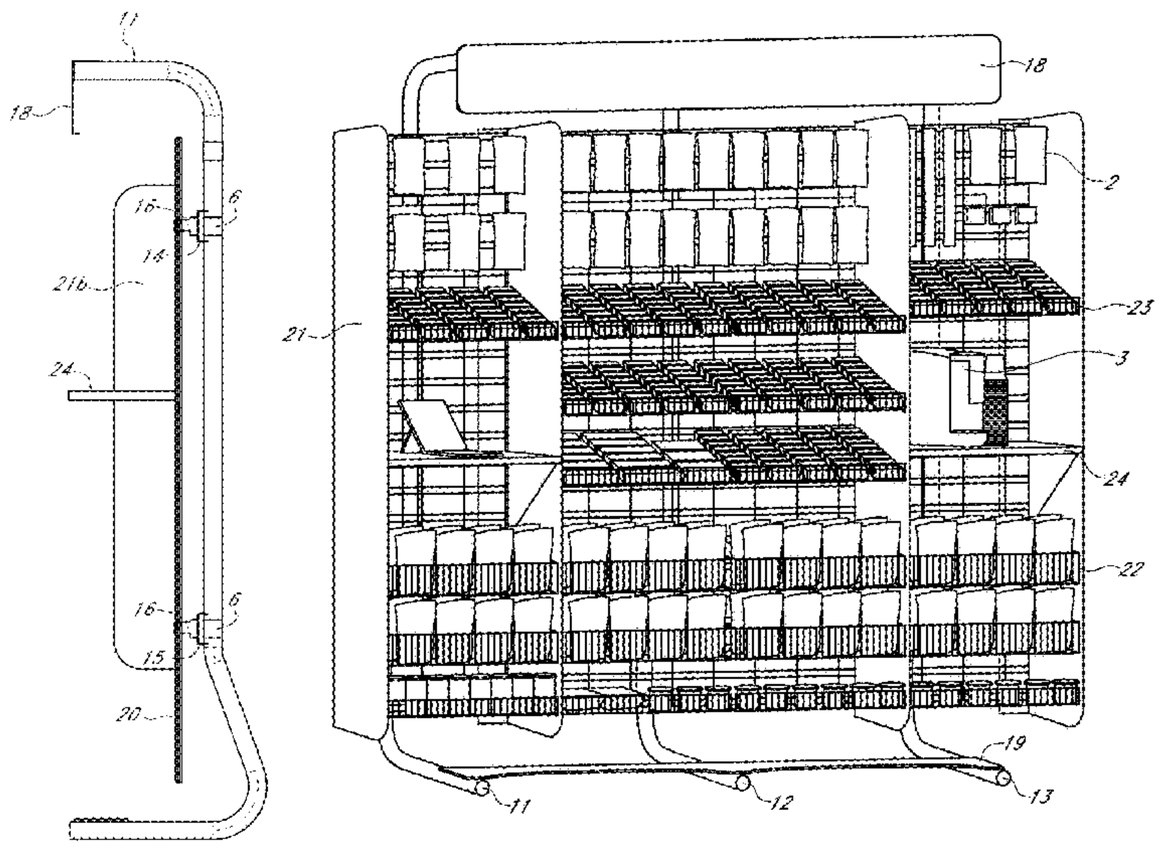
International Search Report, PCT International Searching Authority, dated Sep. 12, 2019, PCT/US2019/029694.

Primary Examiner — Jonathan Liu
Assistant Examiner — Devin K Barnett
(74) *Attorney, Agent, or Firm* — Hamilton IP Law, PC; Jay R. Hamilton; Charles A. Damschen

(57) **ABSTRACT**

A Self-Standing Merchandise Frame is provided for displaying merchandise items on a store and allowing the attachment of multiple racks of numerous sizes, for instance, 24 inches, 48 inches and 96 inches. The embodiment is configured of a sign plate, a first and a second vertical tubes, an upper and a lower support and a base plate which structurally support the self-standing of the frame. Depend on the particular application, Self-Standing Merchandise Frame could be assembled as a single stand or a double stand, without any limitation and restriction.

18 Claims, 35 Drawing Sheets



(56) **References Cited**

U.S. PATENT DOCUMENTS

3,091,345	A *	5/1963	Hoose	A47F 5/13 108/163
3,101,681	A *	8/1963	Streater	A47B 57/425 108/28
3,122,238	A *	2/1964	Brunette	A47F 5/13 211/133.2
3,171,541	A *	3/1965	Weisberger	A47F 5/01 211/37
3,229,823	A *	1/1966	Hummer	A47F 5/13 211/187
3,330,518	A *	7/1967	Adler	G09F 7/08 248/224.61
3,435,958	A *	4/1969	Chesley	A47F 5/0031 211/133.2
3,532,224	A *	10/1970	Grubb	A47F 5/13 211/206
3,726,415	A *	4/1973	Malik	A47F 5/13 211/169
3,730,108	A *	5/1973	Stroh	A47B 45/00 108/108
3,850,300	A *	11/1974	Young, Jr.	A47F 5/01 211/4
4,127,196	A *	11/1978	Boucher	A47F 5/0815 160/351
4,226,190	A *	10/1980	Ashton	A47F 5/13 108/11
4,586,618	A *	5/1986	Norman	A47F 5/083 211/133.3
4,697,712	A *	10/1987	Valiulis	A47F 5/01 108/107
4,884,702	A *	12/1989	Rekow	A47F 5/01 211/90.02
4,890,747	A *	1/1990	Sayers	A47F 5/0807 211/106
4,919,280	A *	4/1990	Phillips	A47F 5/08 211/187
4,960,214	A *	10/1990	Sayers	A47F 5/01 211/133.2
5,031,783	A *	7/1991	Goudreau	A47F 5/083 211/106
5,439,122	A *	8/1995	Ramsay	A47F 5/0081 211/128.1
5,449,076	A *	9/1995	Van Noord	A47F 1/126 211/106
5,482,168	A *	1/1996	Welch	A47B 96/00 211/106
5,529,322	A *	6/1996	Barton	A45C 5/14 108/147.11
5,547,271	A *	8/1996	Rydell	A47B 81/00 232/1 B
5,573,124	A *	11/1996	Frost	A47F 5/083 211/106
5,588,543	A *	12/1996	Finger	A47F 5/083 211/106
5,752,610	A *	5/1998	Remmers	A47B 55/02 108/181
5,769,248	A *	6/1998	Johnson	A47F 5/0807 211/103
5,797,501	A *	8/1998	Von Gunten	A47B 57/42 108/180
5,871,115	A *	2/1999	Kohn	A47F 5/01 206/506
5,881,892	A *	3/1999	Loo	A47F 5/0025 211/126.13
6,082,560	A *	7/2000	Timm	A47B 57/10 108/152
6,089,387	A *	7/2000	Varfolomeeva	A47B 57/06 211/106
6,164,462	A *	12/2000	Mumford	A47F 5/0093 108/102
6,241,107	B1 *	6/2001	Boyer	A47F 5/137 211/106
6,299,001	B1 *	10/2001	Frolov	A47F 5/01 211/106
6,364,137	B1 *	4/2002	Glauth	A47F 5/137 211/126.9
6,405,880	B1 *	6/2002	Webb	A47F 1/12 108/107
6,564,952	B1 *	5/2003	Suttles	A47B 55/02 211/187
6,575,315	B2 *	6/2003	Zidek	A47F 5/01 211/106
6,659,295	B1 *	12/2003	De Land	A47B 96/04 211/184
7,128,221	B2 *	10/2006	Metcalf	A47F 5/137 211/59.2
7,188,740	B2 *	3/2007	Marchetta	A47B 47/022 108/102
7,448,634	B1 *	11/2008	Raub	A47F 5/083 108/108
7,533,948	B2 *	5/2009	Smith	A47B 55/02 108/107
7,815,202	B2 *	10/2010	Richards	A47F 5/135 211/126.8
7,954,656	B1 *	6/2011	Cuzzocrea	A47F 5/103 211/189
7,959,020	B2 *	6/2011	Rosen	D06F 79/02 211/106
D649,819	S *	12/2011	Malik	D6/513
8,540,088	B2 *	9/2013	Brasher	A47F 5/083 211/106
8,616,388	B2 *	12/2013	Butler	A47B 43/00 108/106
8,636,156	B2 *	1/2014	Malik	A47B 57/04 211/106
8,776,414	B2 *	7/2014	Clark	G09F 15/00 108/107
9,004,300	B1 *	4/2015	Morrell	A47F 5/137 108/107
9,271,584	B1 *	3/2016	Weinstein	A47F 5/135
D798,067	S *	9/2017	Felsenthal	D6/320
9,756,939	B1 *	9/2017	Ruiz	A47B 43/04
9,936,825	B1	4/2018	Lindblom et al.	
D849,458	S *	5/2019	Nichols	D6/672
10,470,590	B2 *	11/2019	Wills	A47F 5/0884
2002/0027115	A1	3/2002	Gay	
2002/0130098	A1 *	9/2002	Simard	A47F 5/01 211/181.1
2003/0168951	A1 *	9/2003	Holbrook	A47B 57/565 312/245
2003/0205545	A1 *	11/2003	Moceri	A47B 46/00 211/90.02
2004/0050814	A1 *	3/2004	Roush	A47F 5/0018 211/201
2004/0060884	A1 *	4/2004	Nook	A47F 5/0018 211/189
2004/0084392	A1 *	5/2004	Richter	A47F 5/0838 211/59.3
2004/0256341	A1 *	12/2004	Donnell	A47F 1/12 211/187
2005/0011420	A1 *	1/2005	Costa	A47B 47/022 108/108
2005/0011844	A1 *	1/2005	Magnusson	A47B 57/16 211/103
2005/0109720	A1 *	5/2005	Marchetta	A47B 47/022 211/87.01
2005/0145147	A1 *	7/2005	Costa	A47B 47/022 108/108
2005/0252872	A1 *	11/2005	Eisele	A47B 57/42 211/187
2005/0263466	A1 *	12/2005	Libman	A47F 5/0815 211/106
2005/0279041	A1 *	12/2005	Staples	A47B 55/02 52/506.06
2006/0032829	A1 *	2/2006	Hutzler	A47B 13/02 211/187
2006/0091092	A1 *	5/2006	Vosbikian	A47F 5/01 211/87.01

(56) **References Cited**

U.S. PATENT DOCUMENTS

2006/0180557	A1*	8/2006	Weinstein	A47B 55/02 211/40
2007/0023376	A1*	2/2007	Black	A47B 47/025 211/187
2007/0045209	A1*	3/2007	Richardson	A47B 87/0223 211/187
2007/0295681	A1*	12/2007	Colin	A47F 5/12 211/90.03
2009/0188875	A1*	7/2009	Wade	A47F 5/01 211/45
2010/0032394	A1*	2/2010	Wang	A47B 96/027 211/90.01
2013/0213918	A1*	8/2013	Doyle, Jr.	F16M 11/00 211/187
2013/0220957	A1	8/2013	Malik	
2013/0306583	A1*	11/2013	Caldwell	A47B 57/581 211/181.1
2014/0149242	A1*	5/2014	Turner, Jr.	A47B 55/02 705/26.1
2015/0313357	A1*	11/2015	David	A47B 47/0083 211/187
2019/0112122	A1*	4/2019	Balicki	A47F 5/01

* cited by examiner

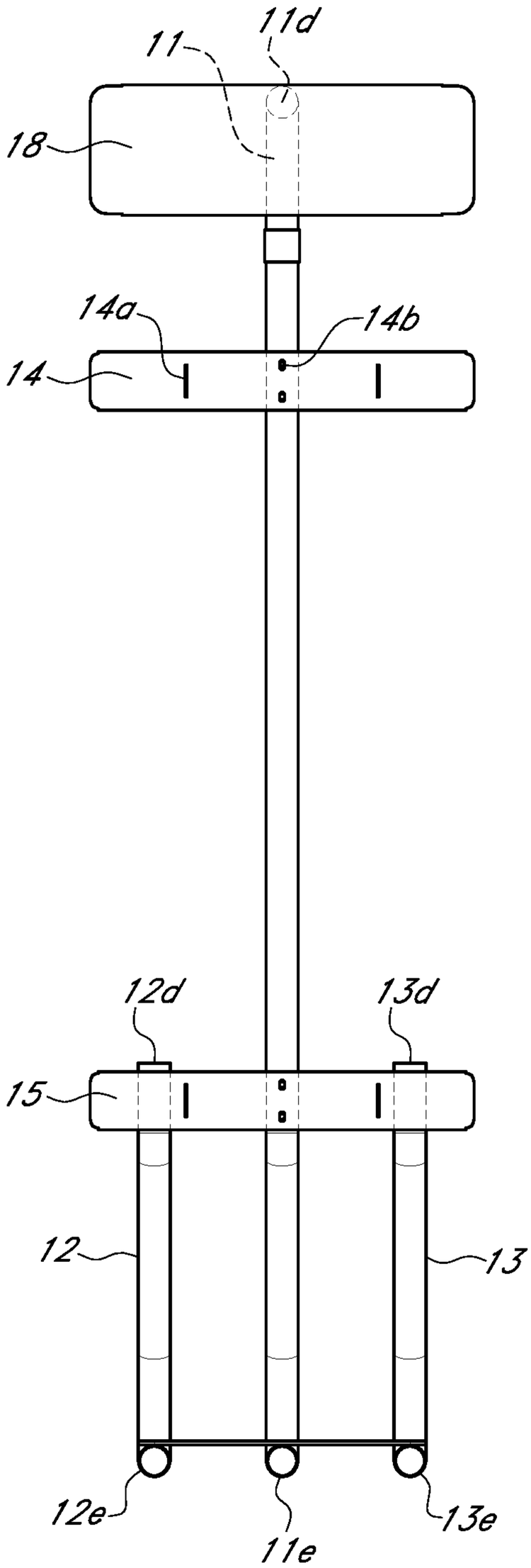


FIG. 1A

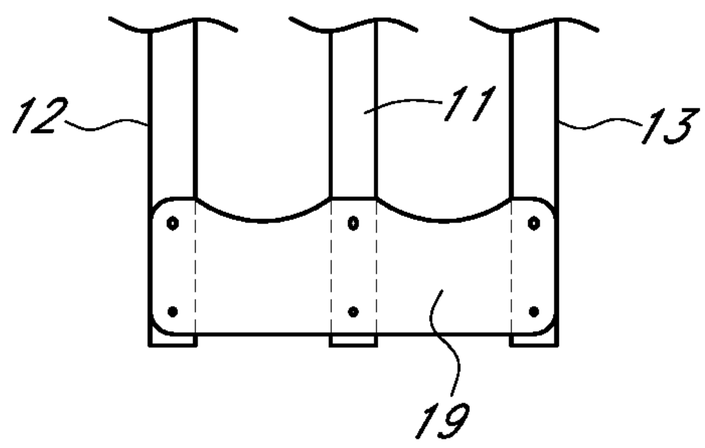


FIG. 1B

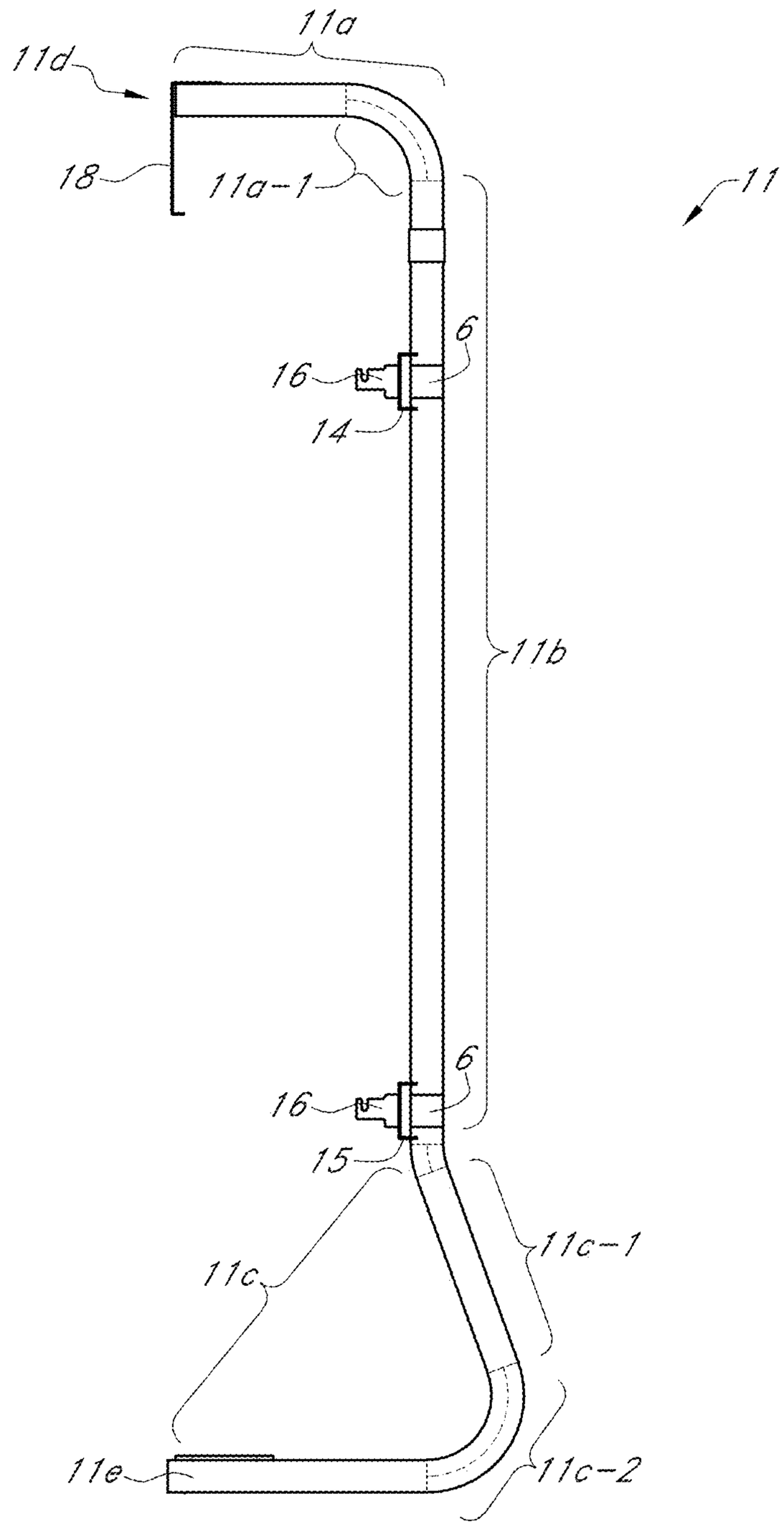


FIG. 1C

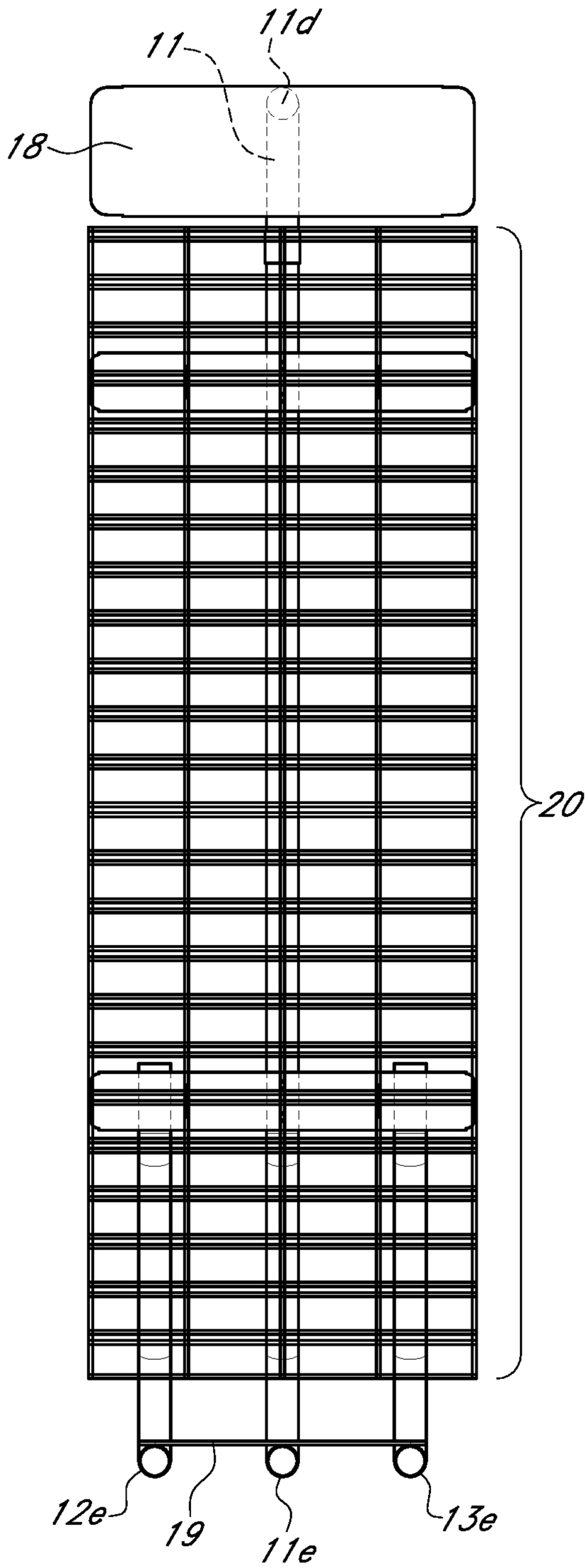


FIG. 1D

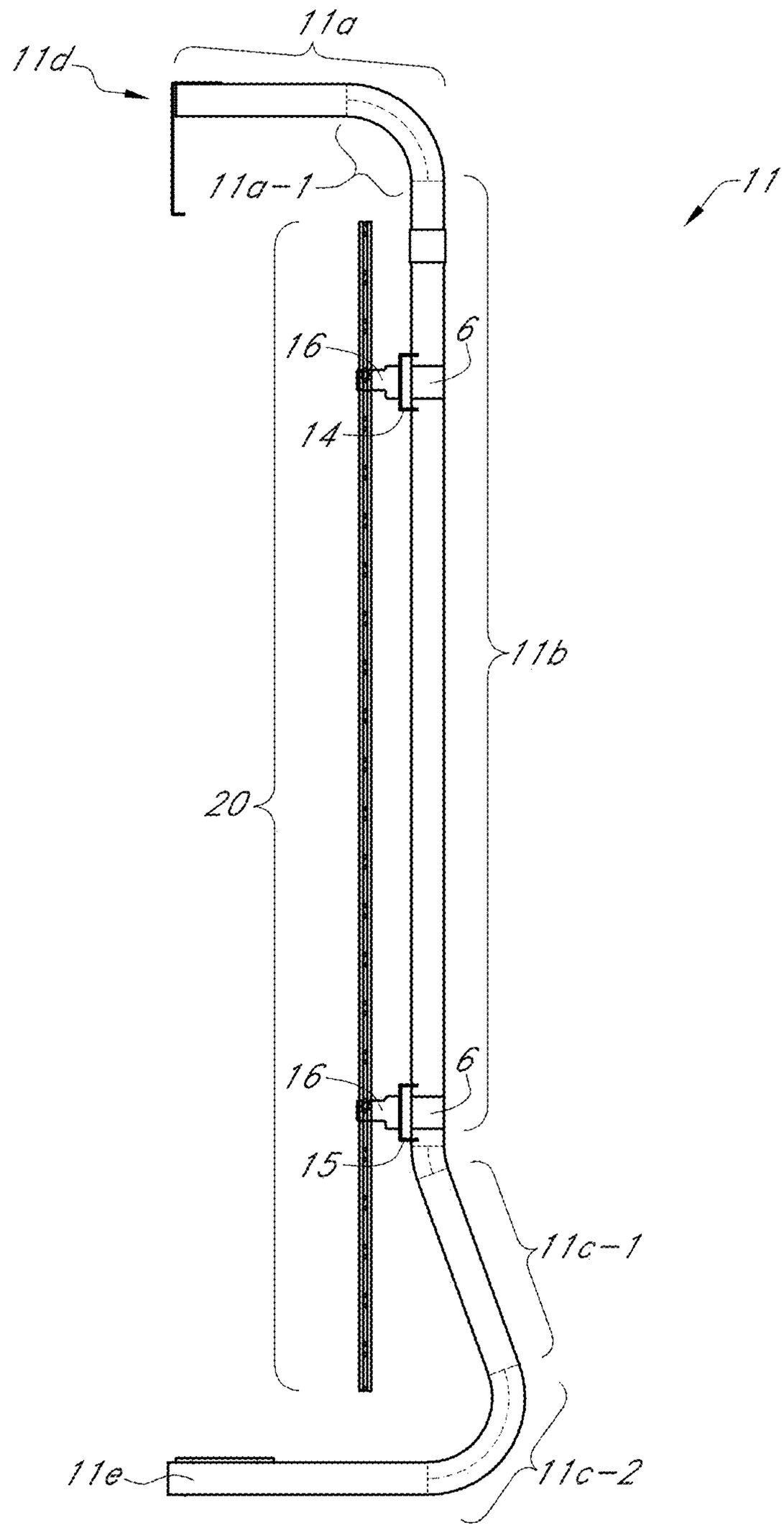


FIG. 1E

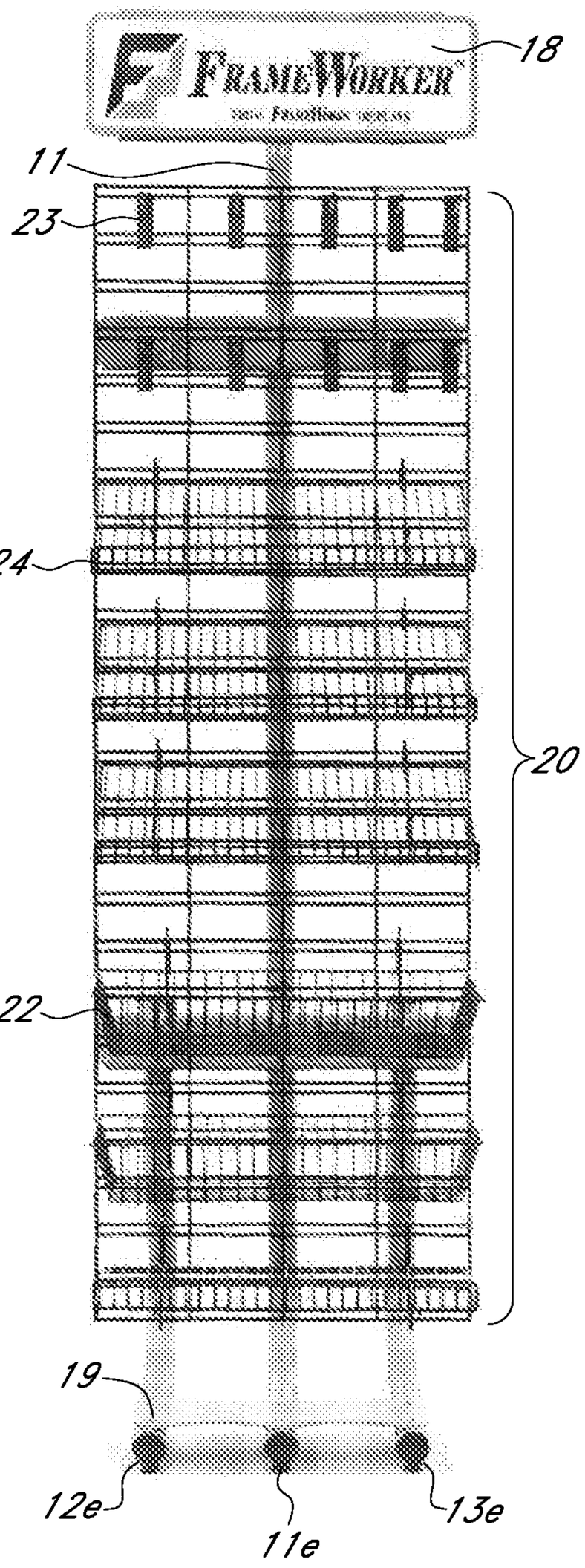


FIG. 1F

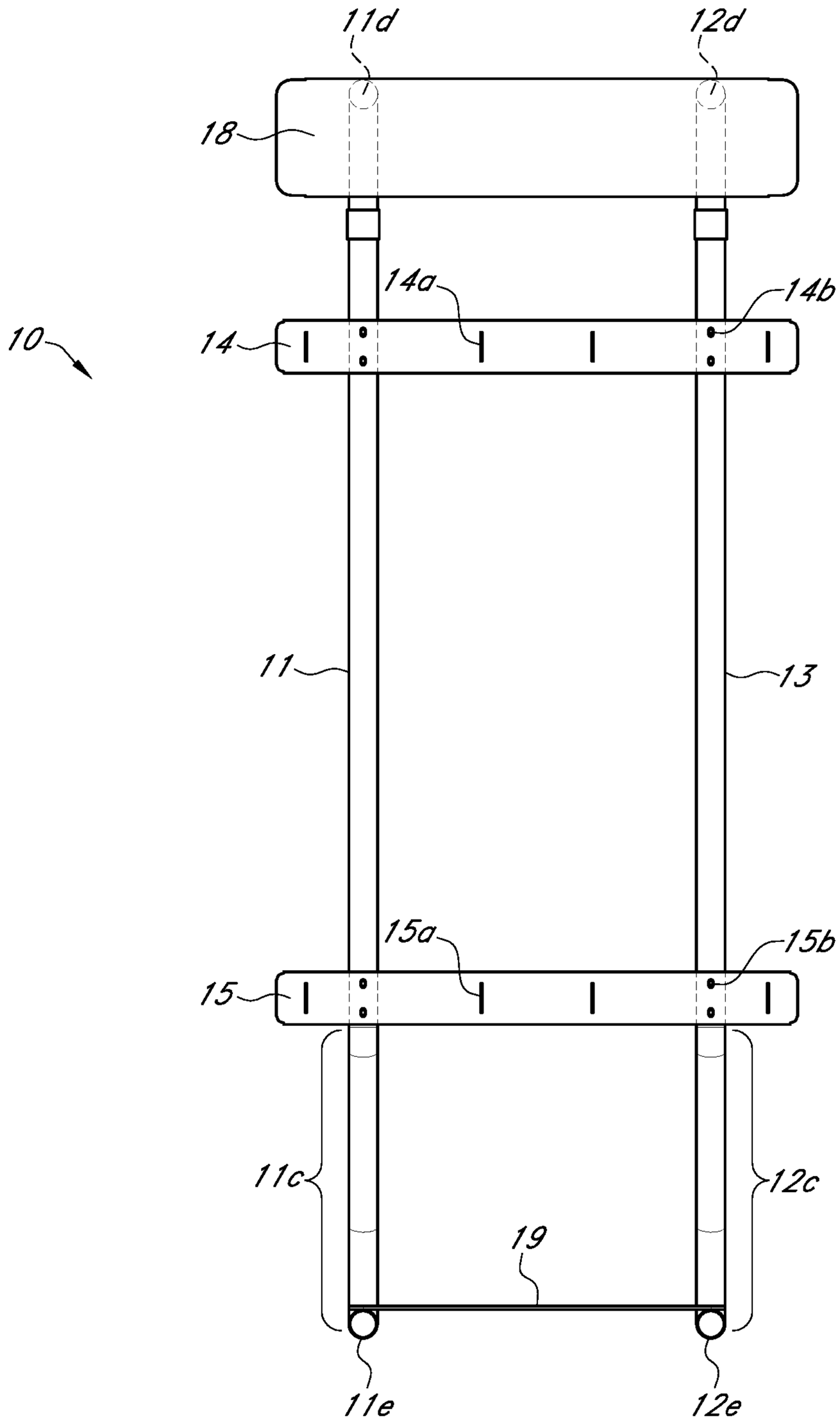


FIG. 2A

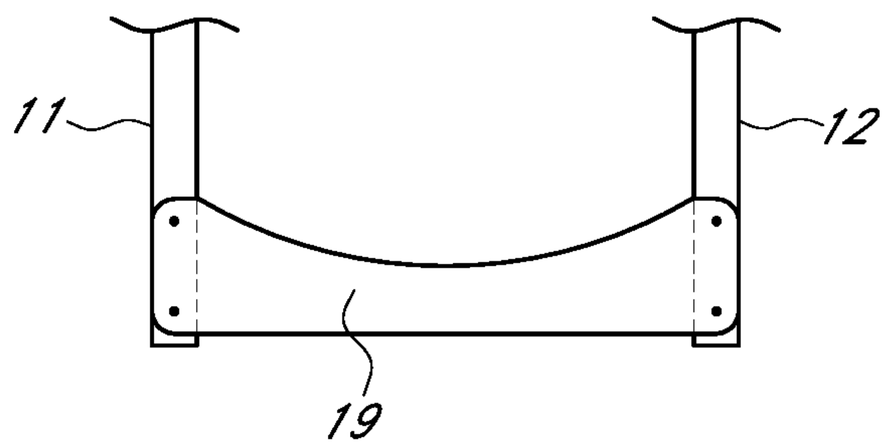


FIG. 2B

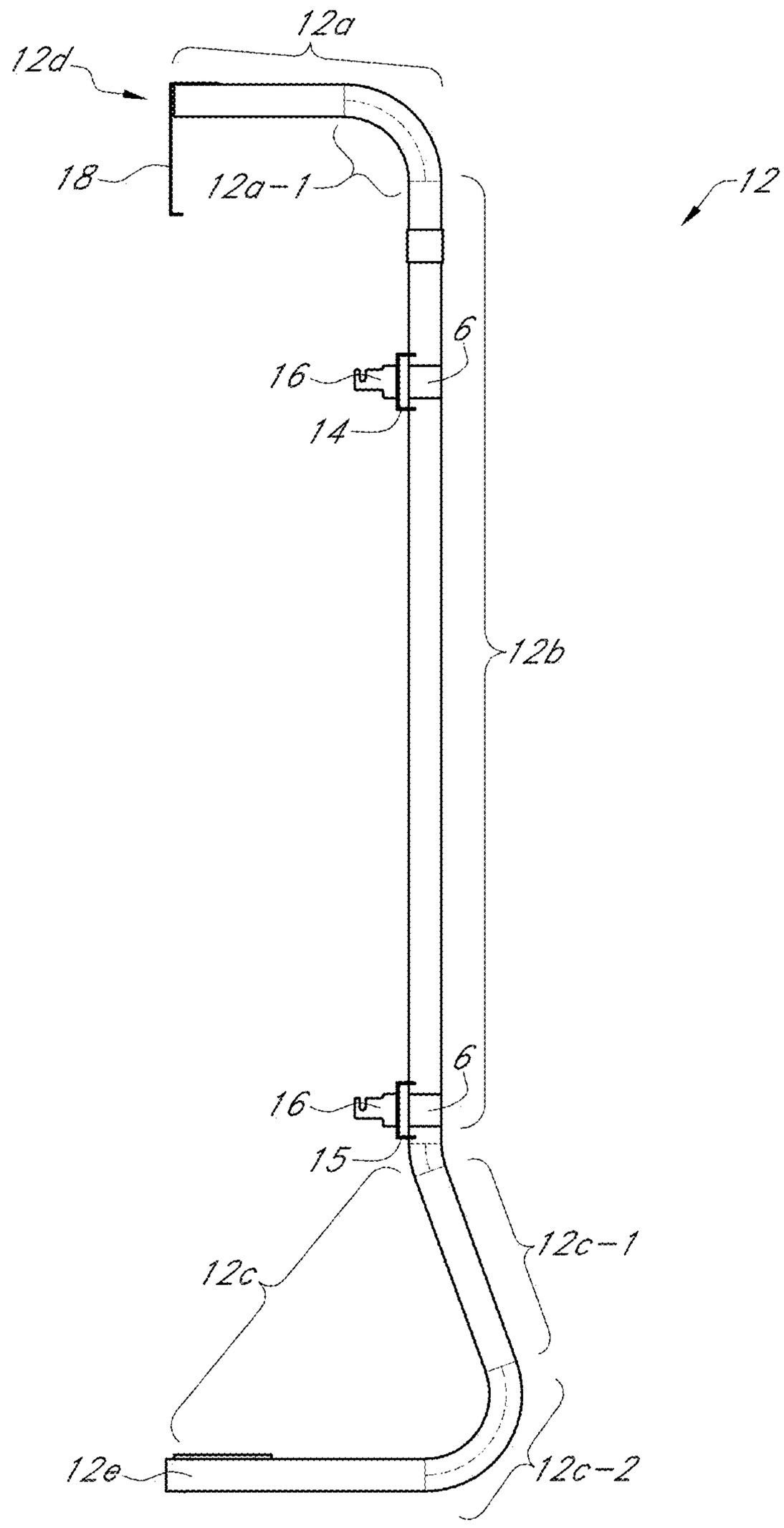


FIG. 2C

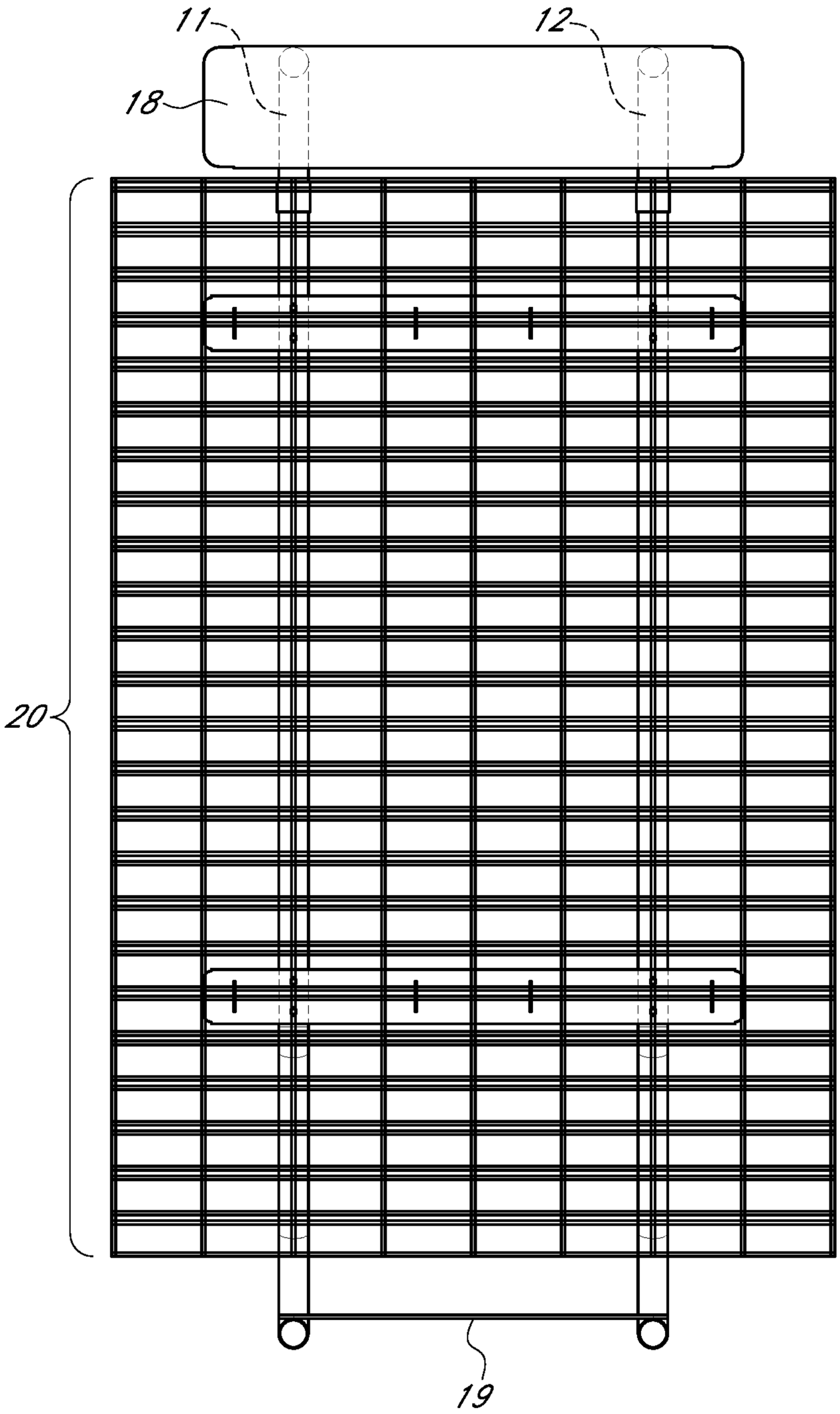


FIG. 2D

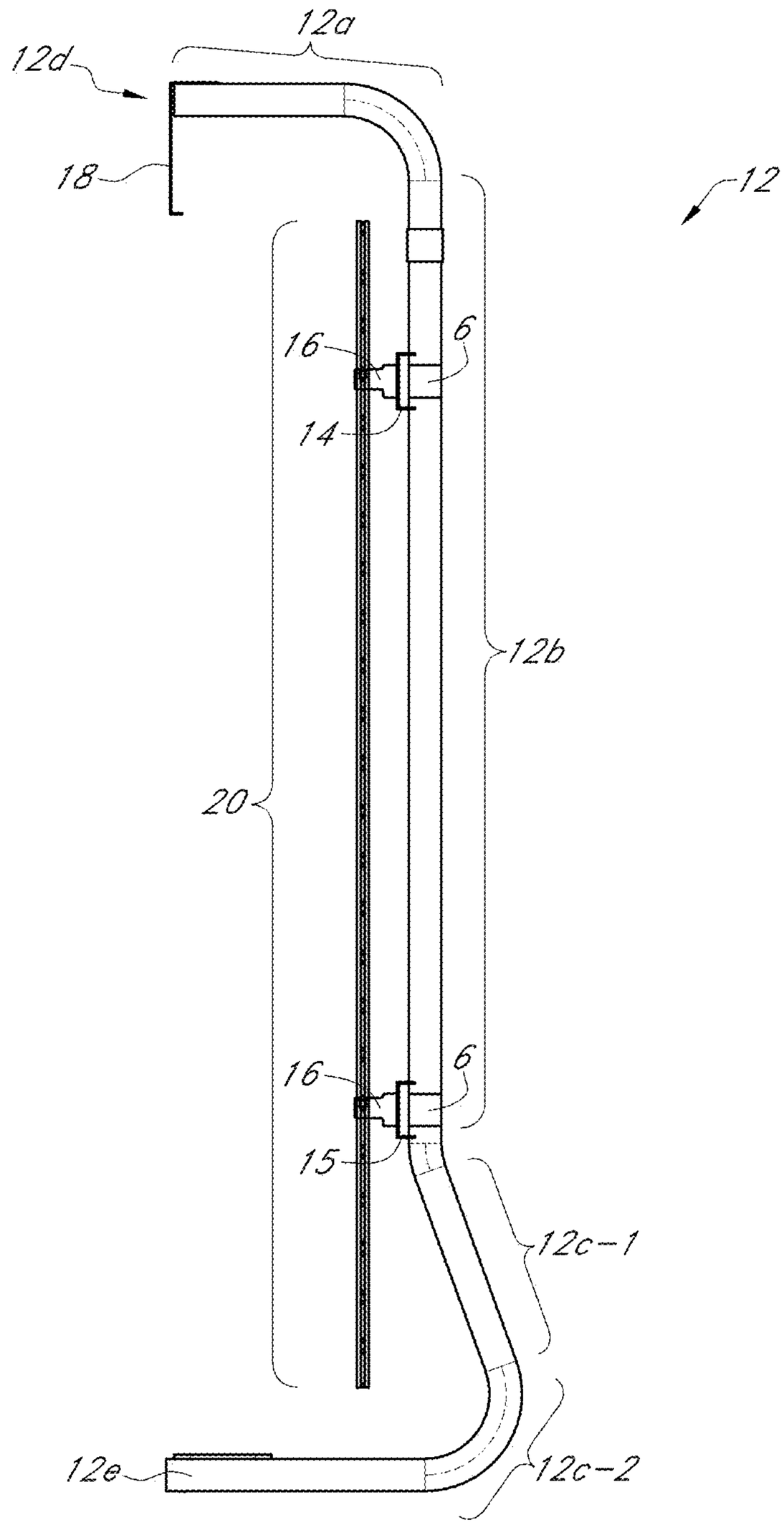


FIG. 2E

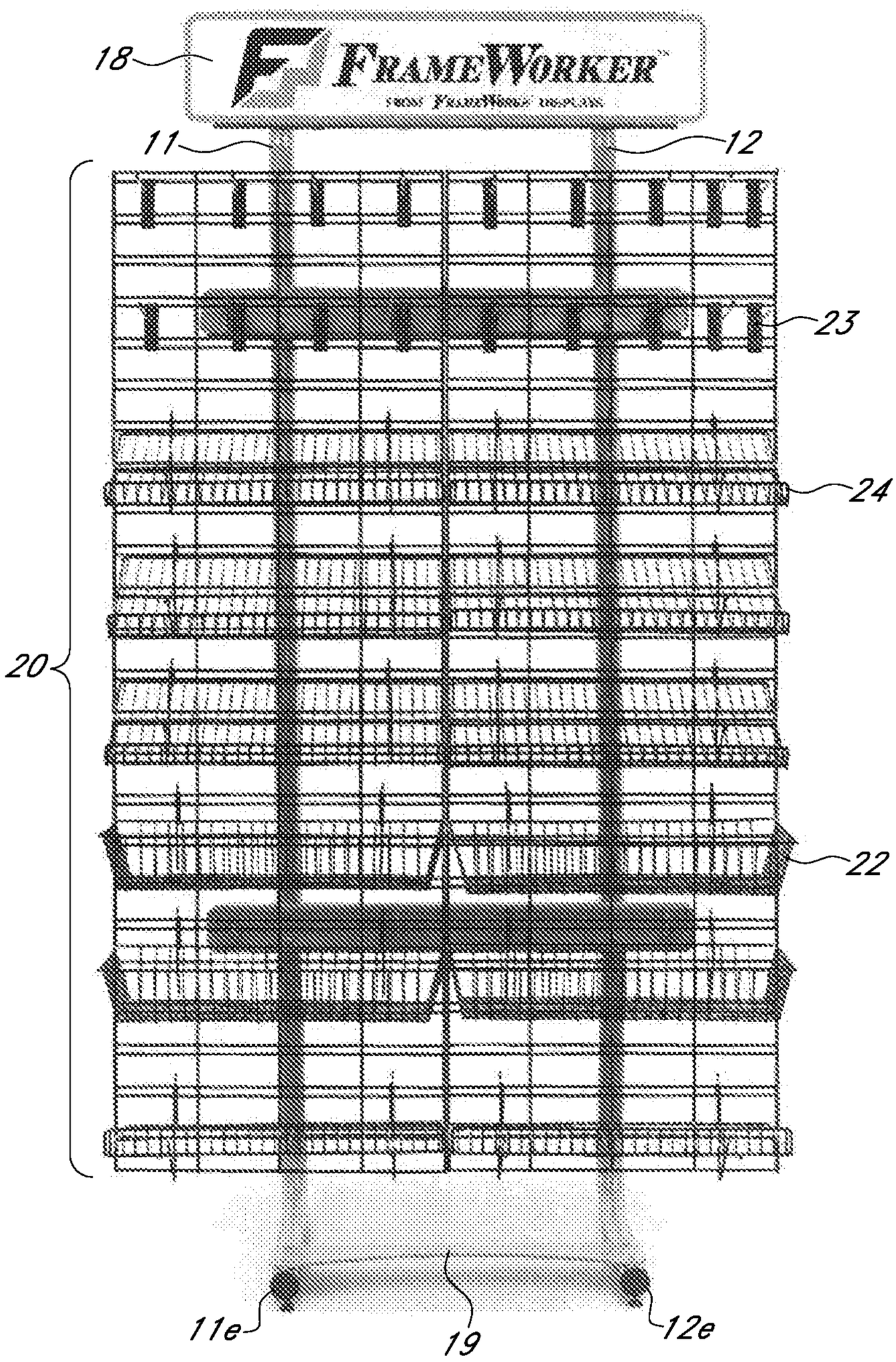


FIG. 2F

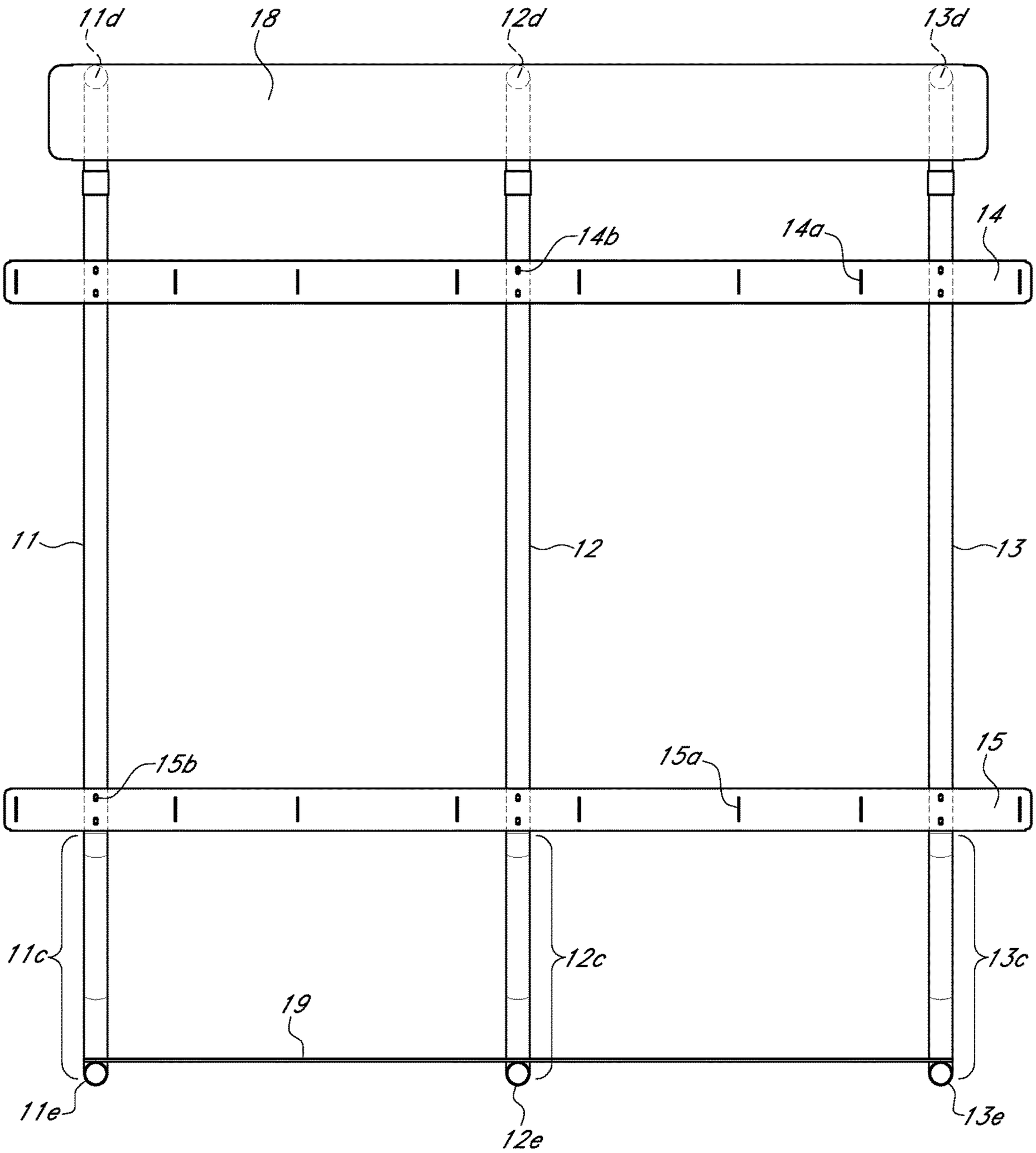

11d
18
12d
13d
14
14b
14a
11
12
13
15
15b
15a
11c
12c
13c
19
11e
12e
13e

FIG. 3A

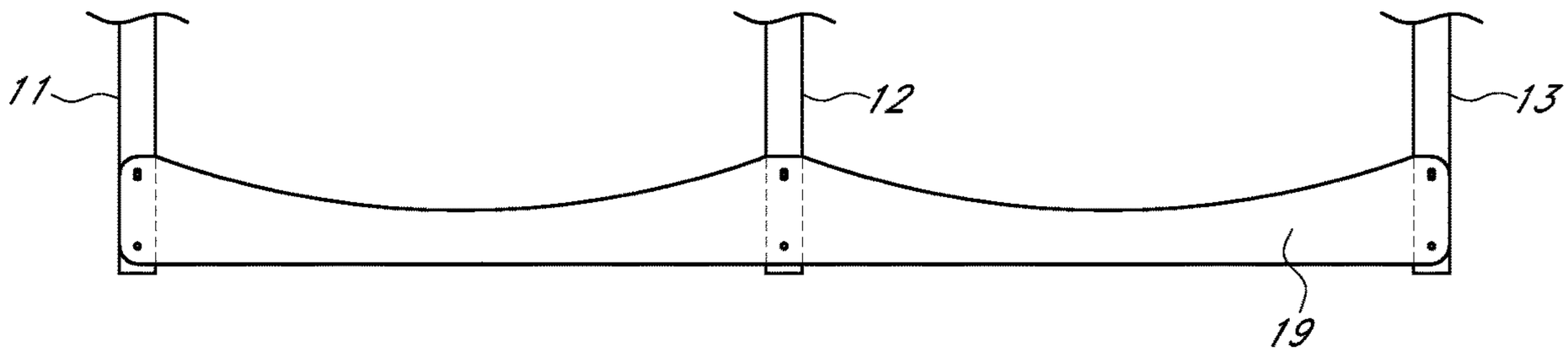


FIG. 3B

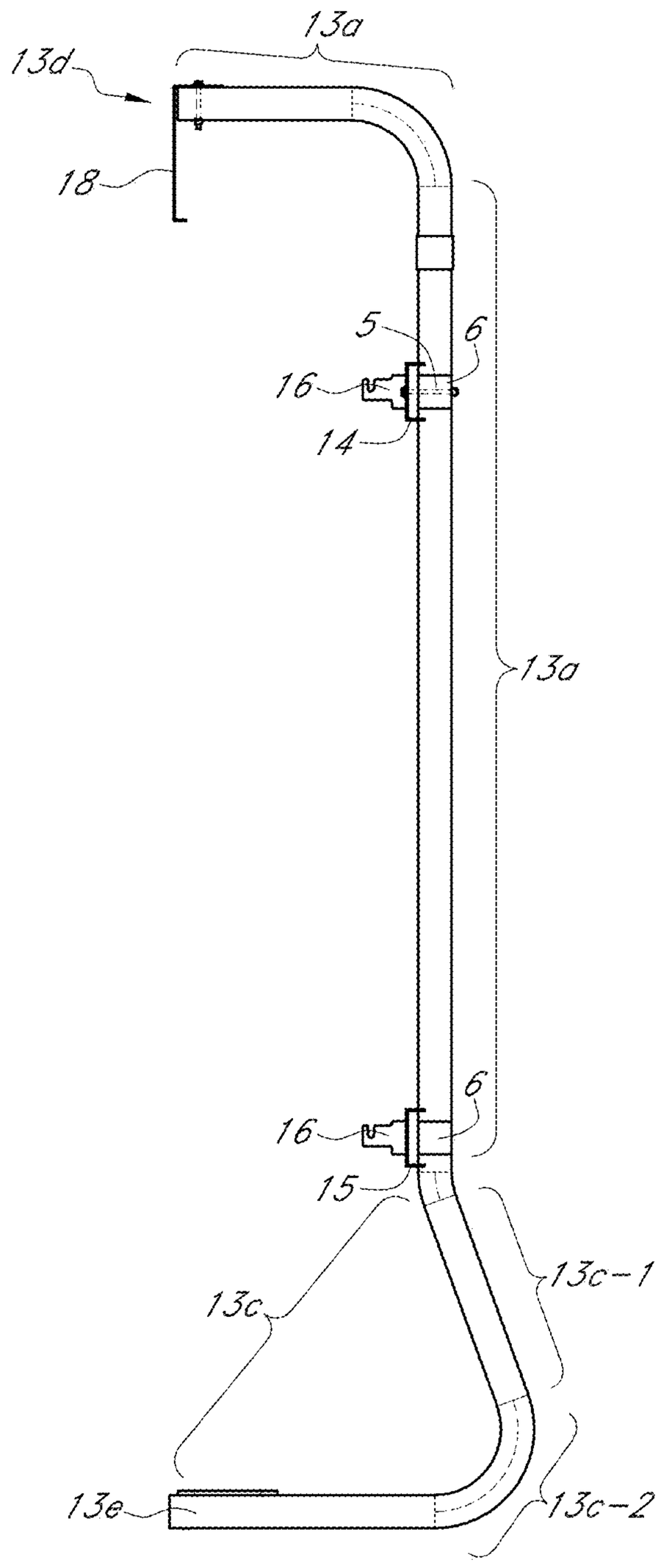
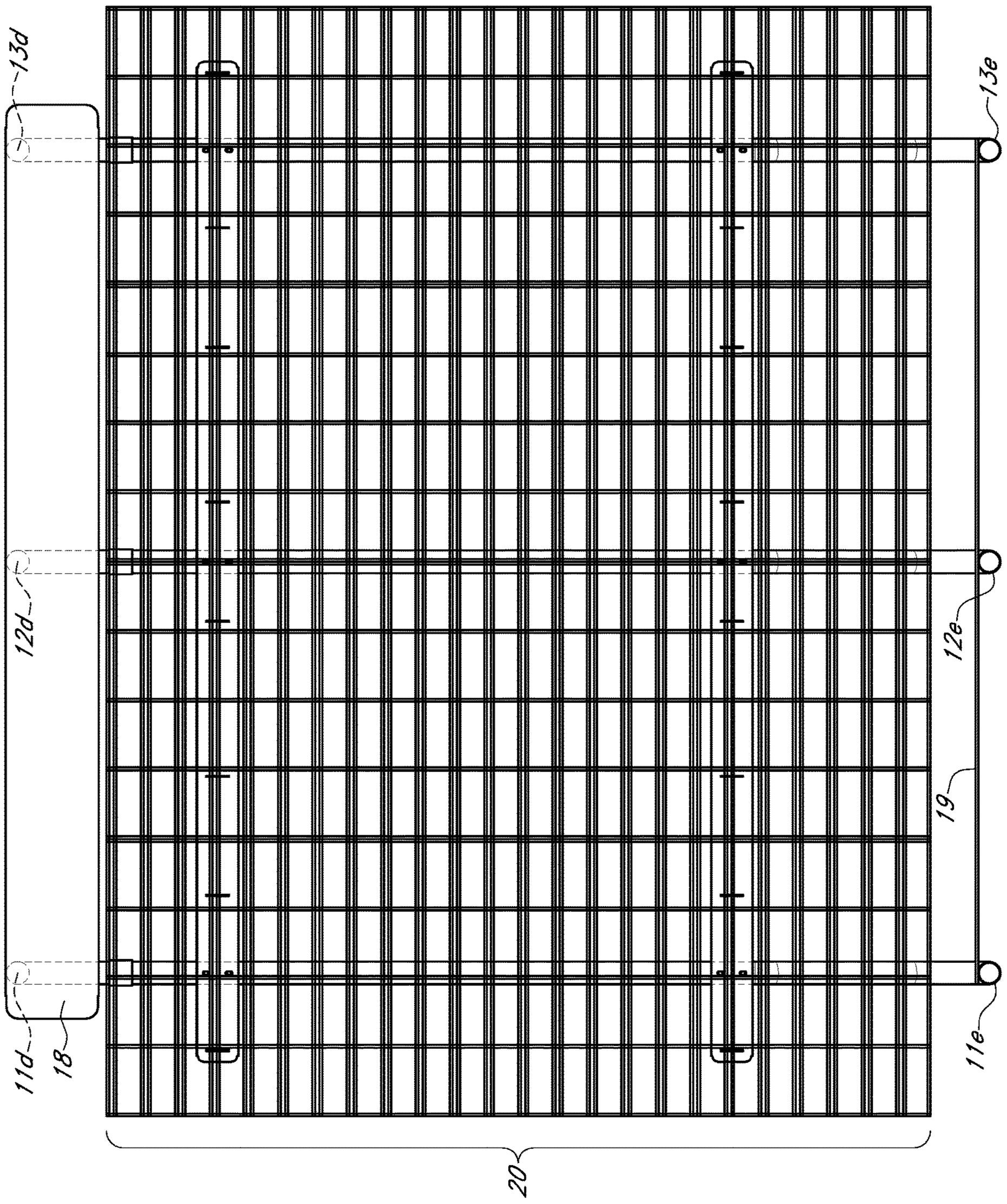


FIG. 3C

FIG. 3D



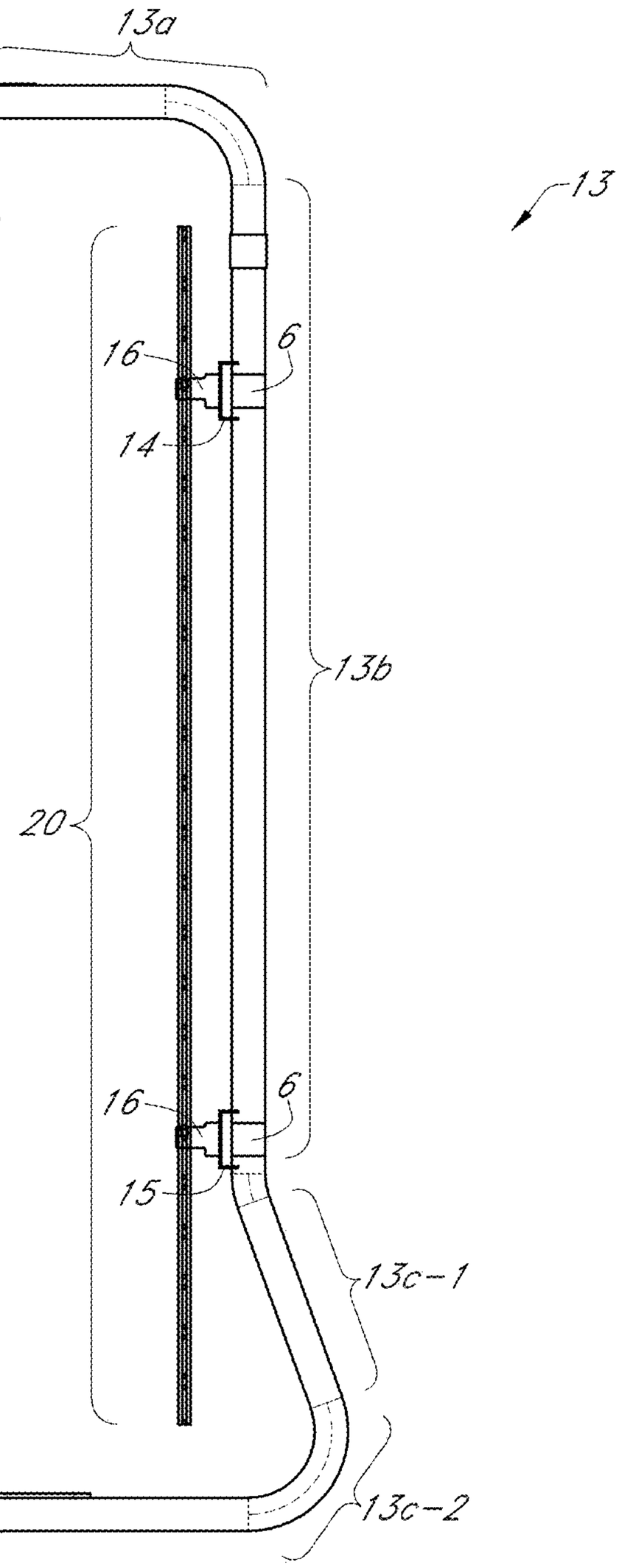
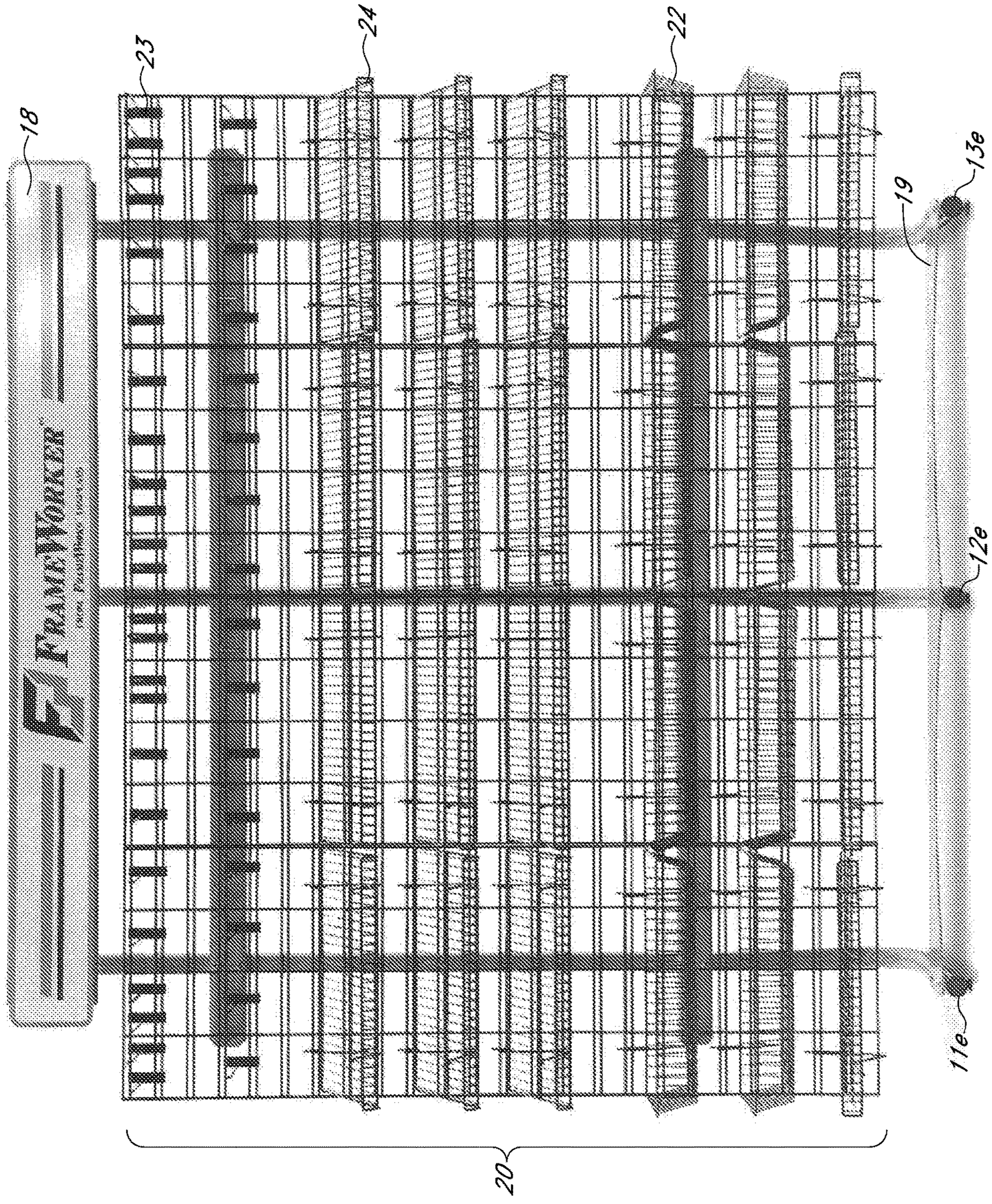


FIG. 3E

FIG. 3F



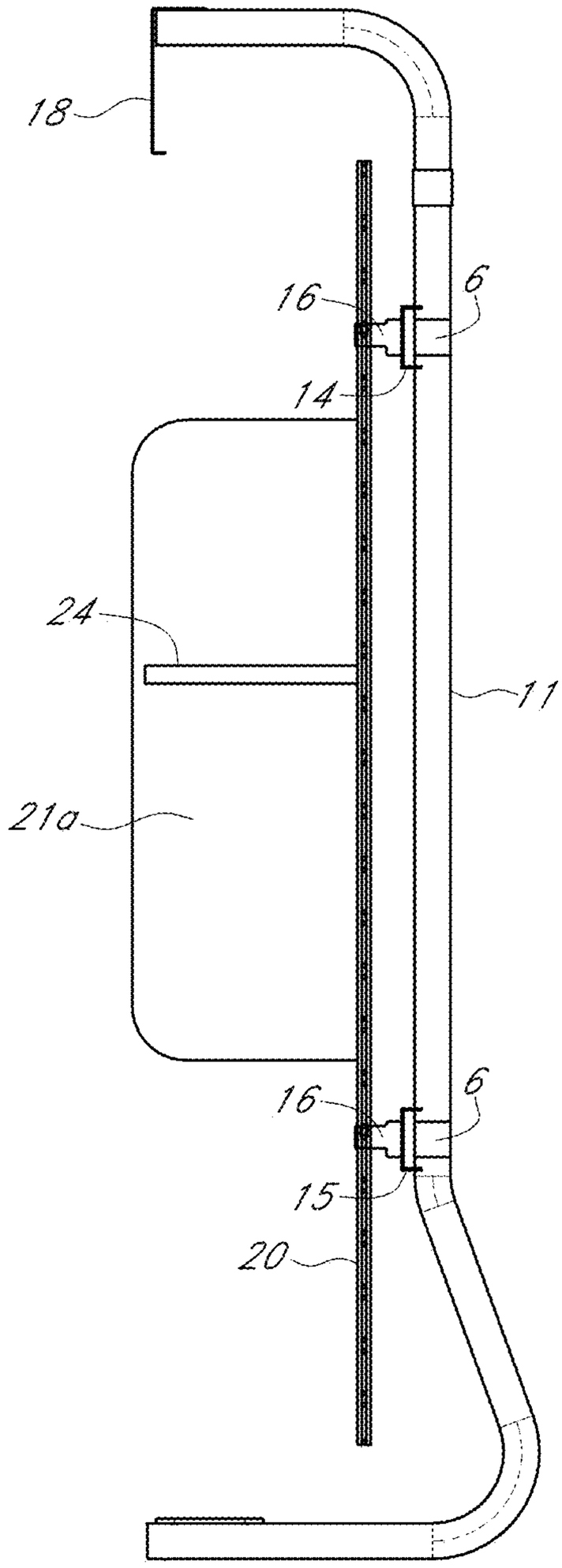


FIG. 4A

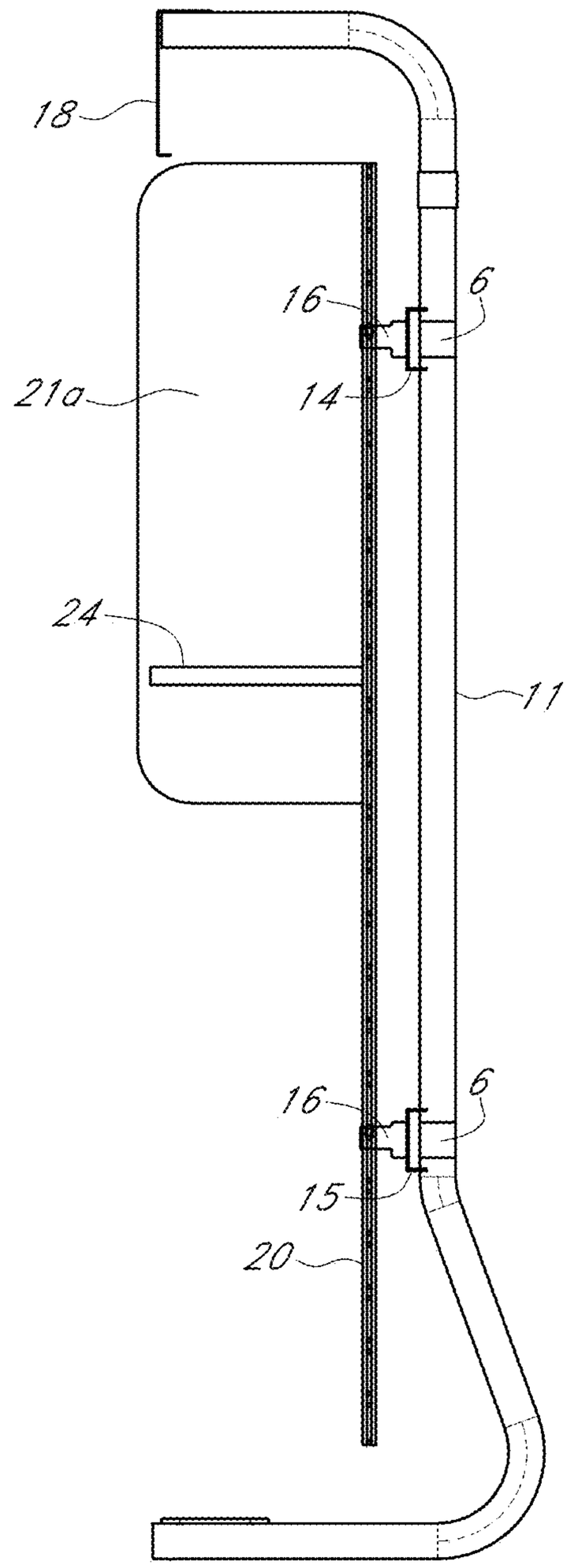


FIG. 4B

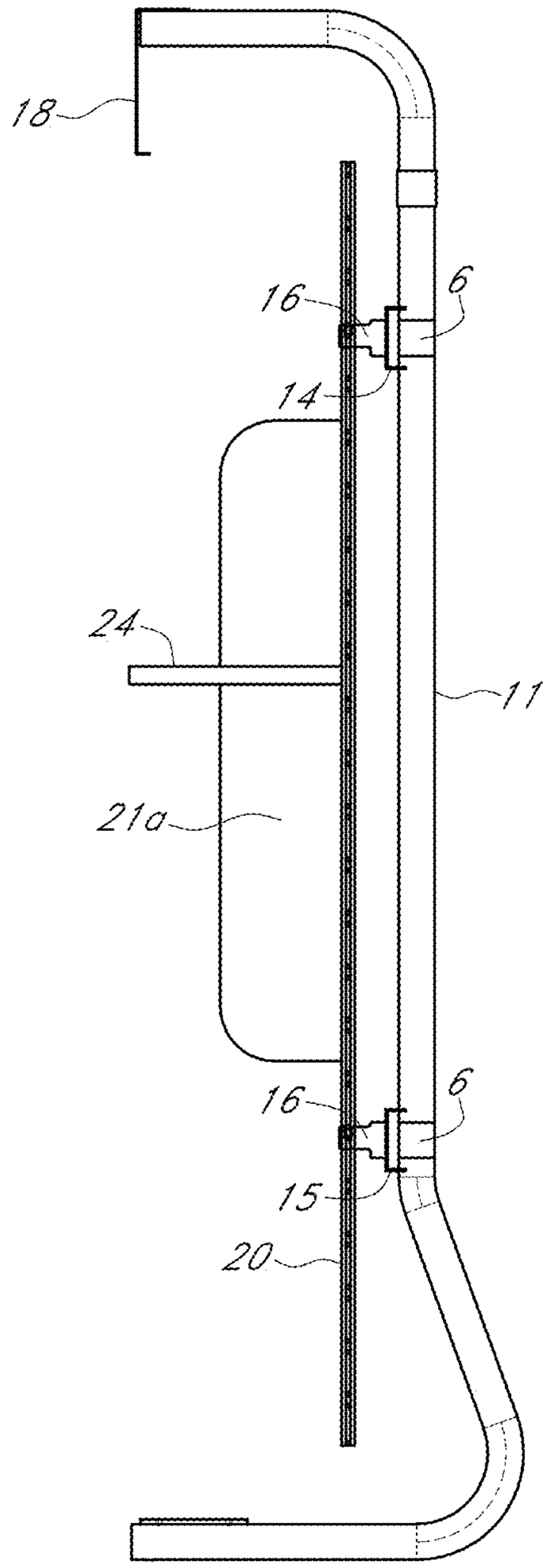


FIG. 4C

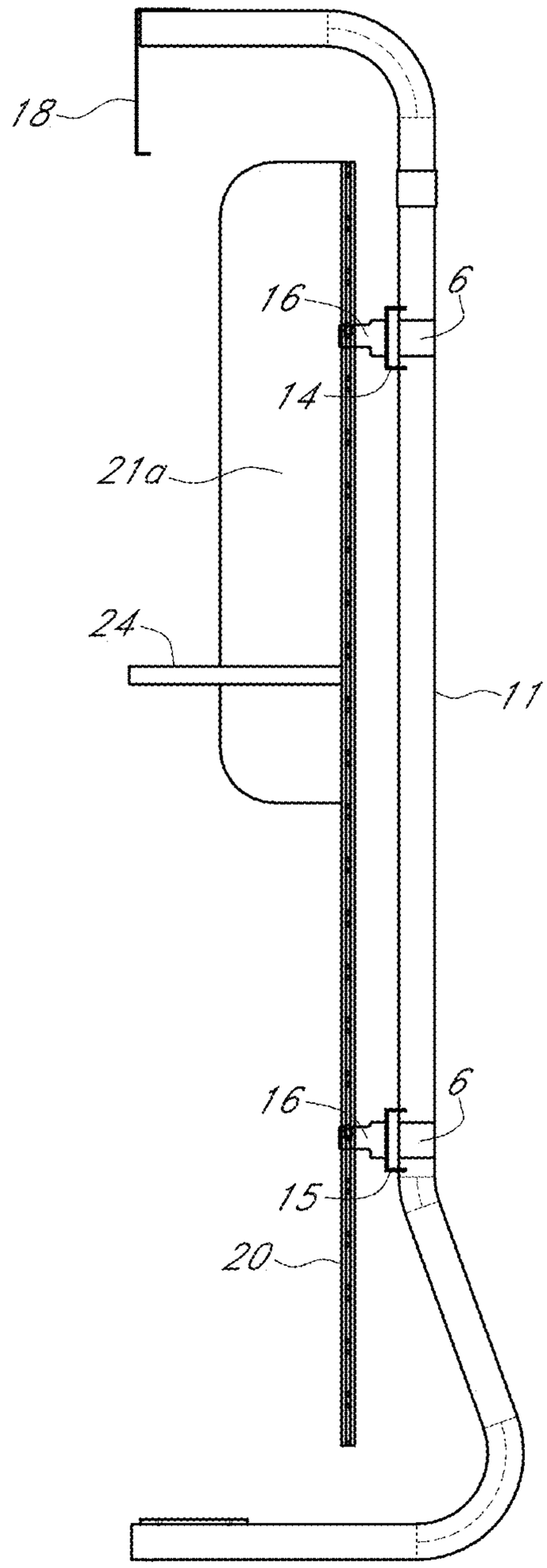


FIG. 4D

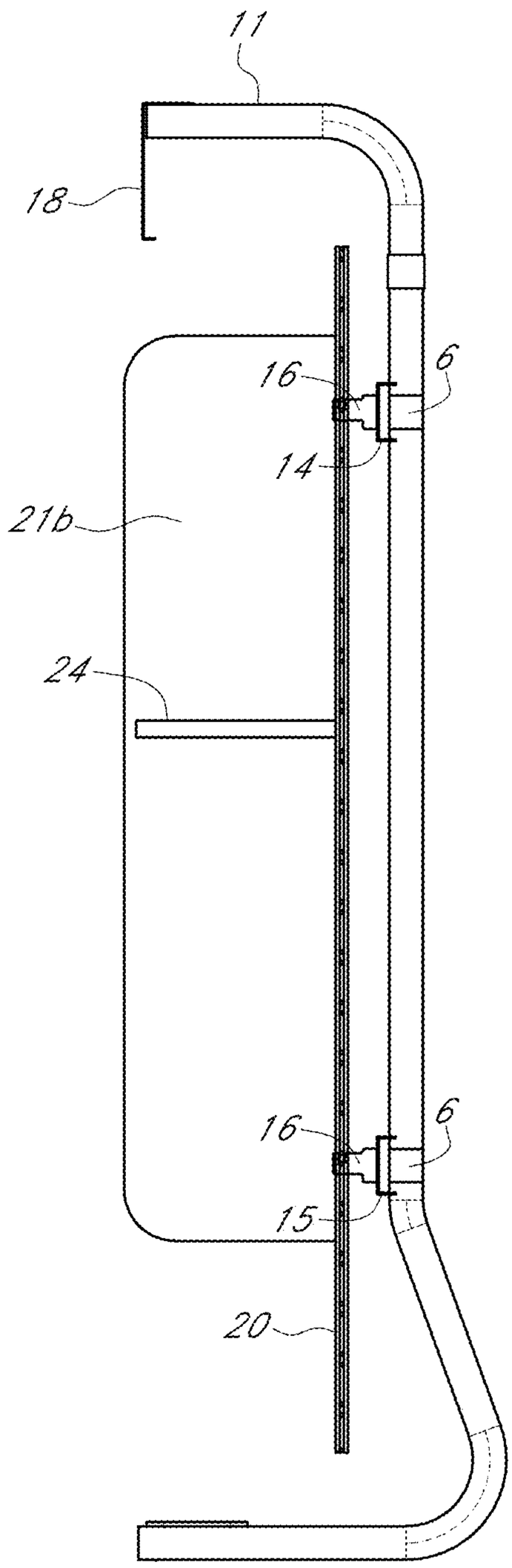


FIG. 5A

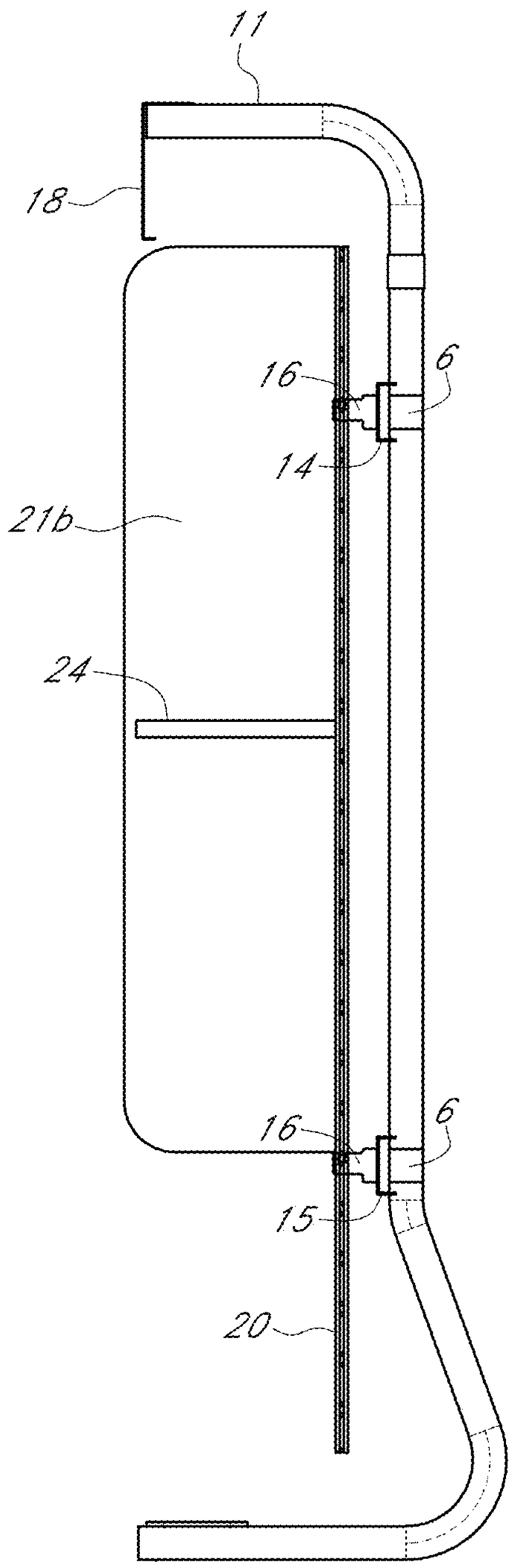


FIG. 5B

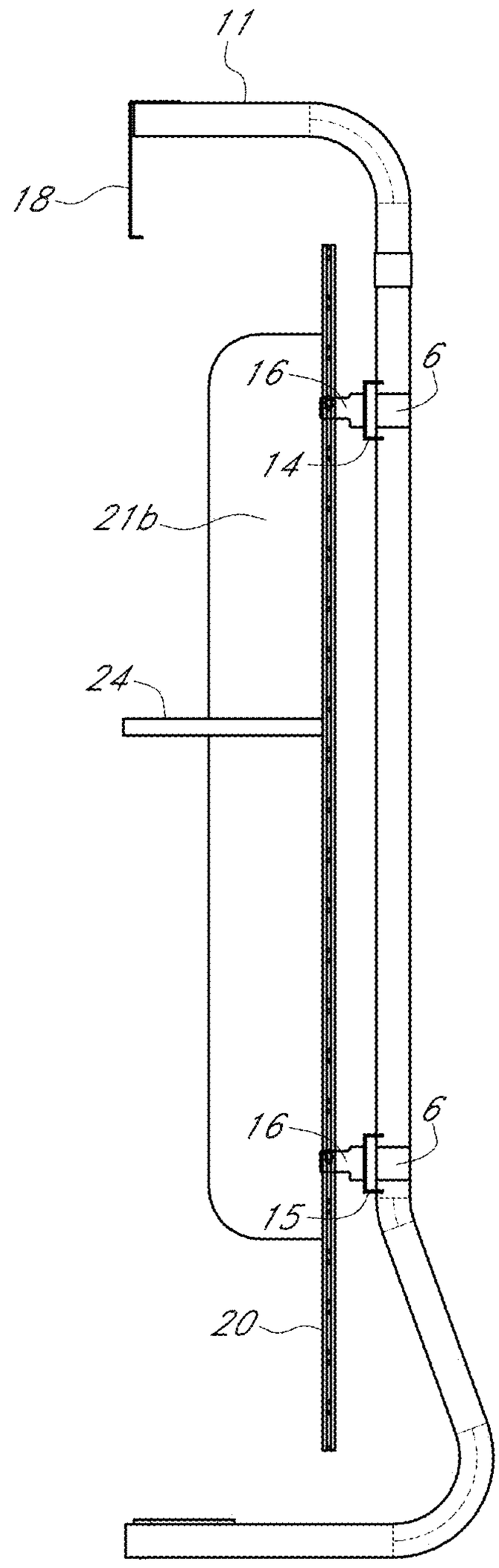


FIG. 5C

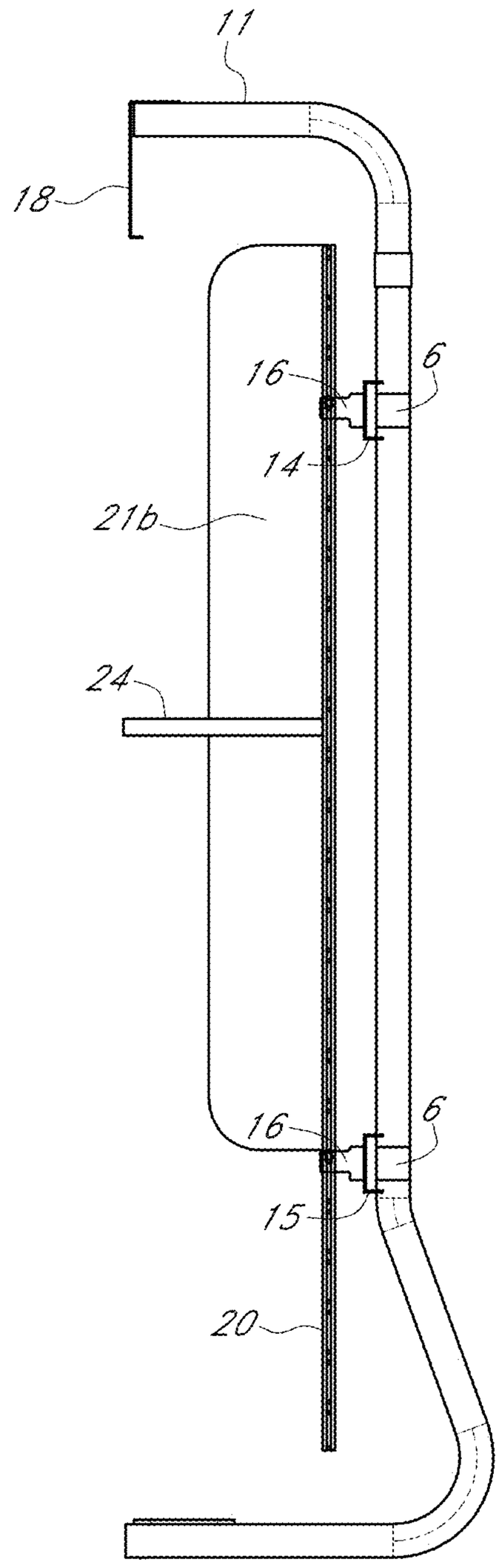


FIG. 5D

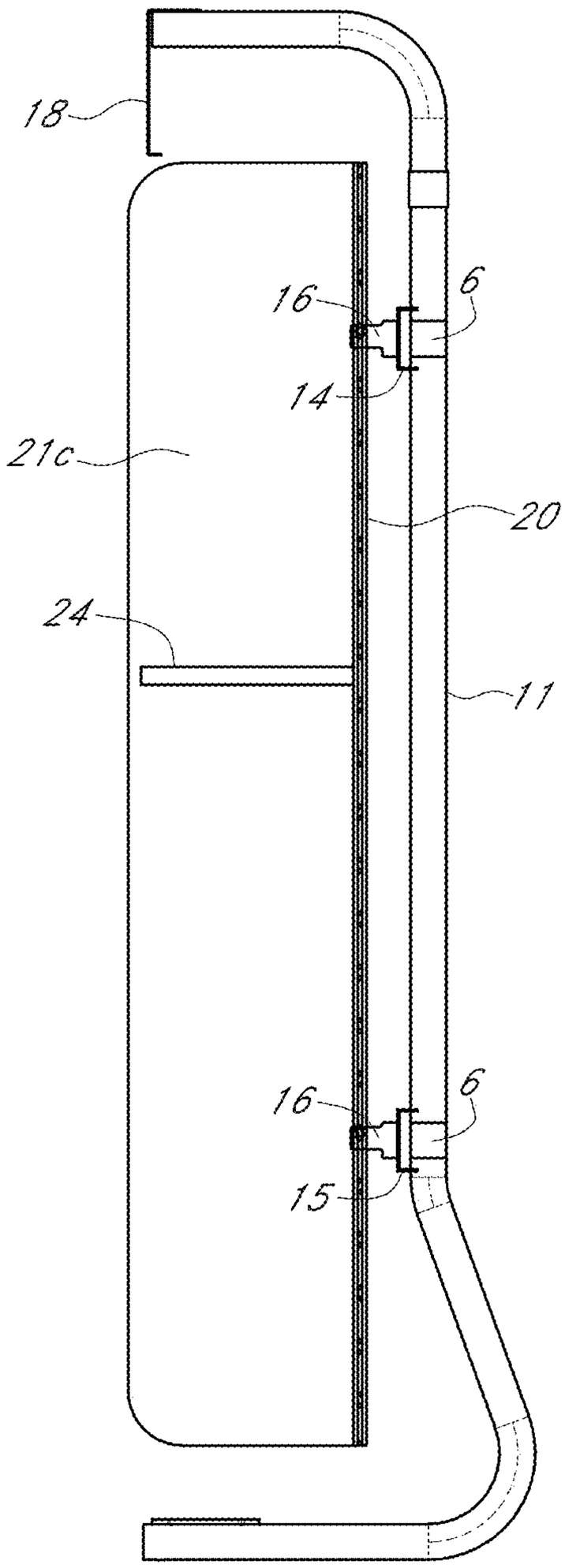


FIG. 6A

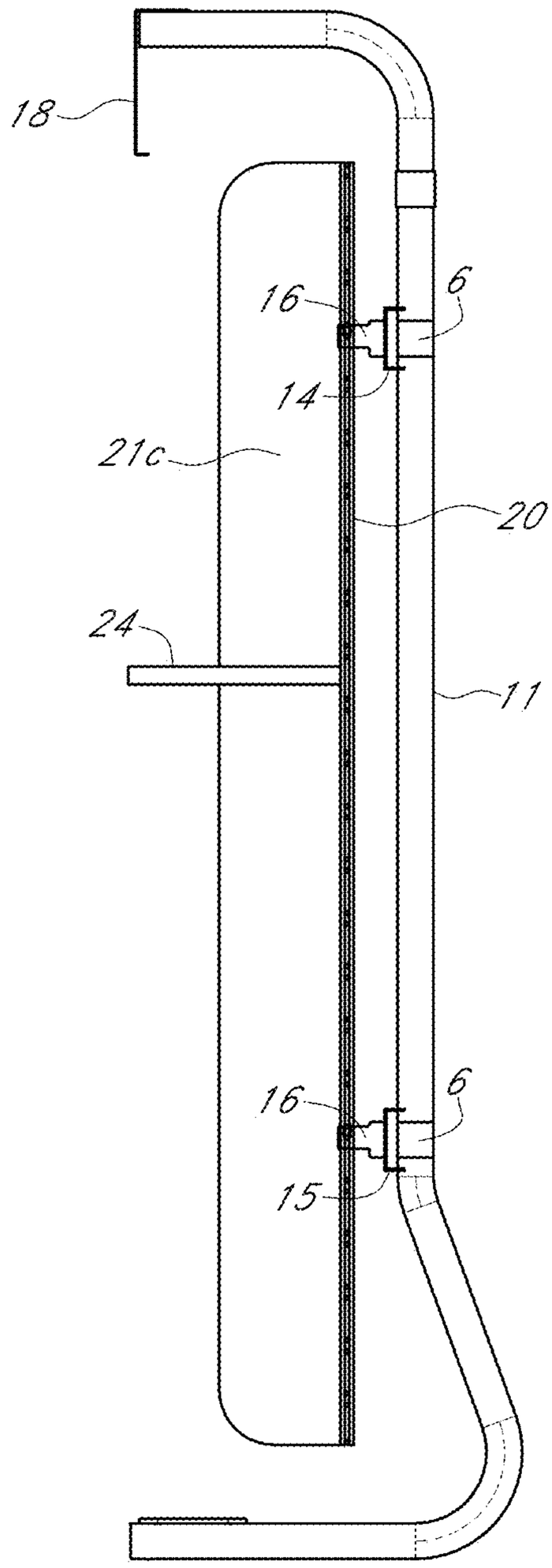


FIG. 6B

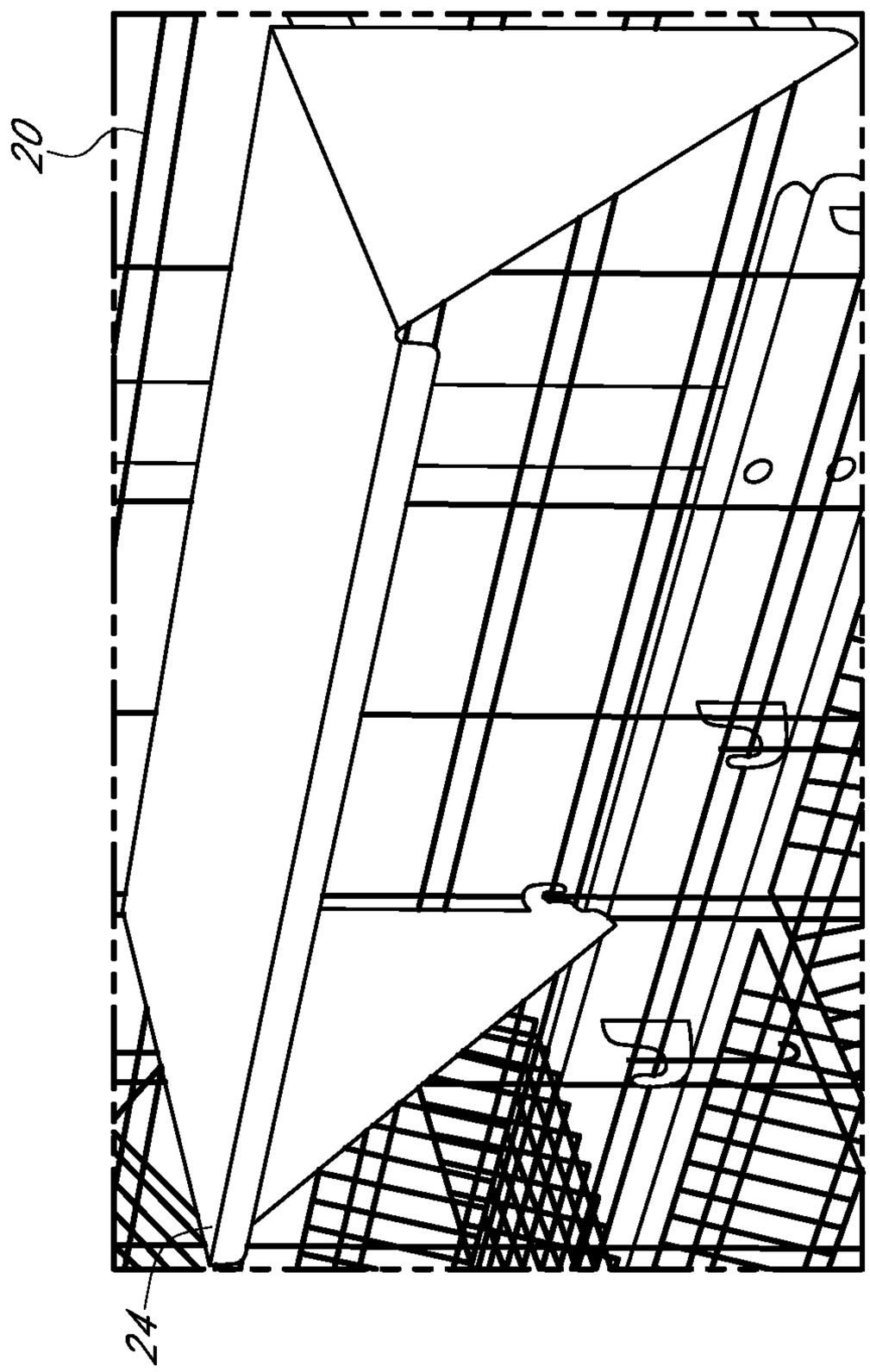


FIG. 7

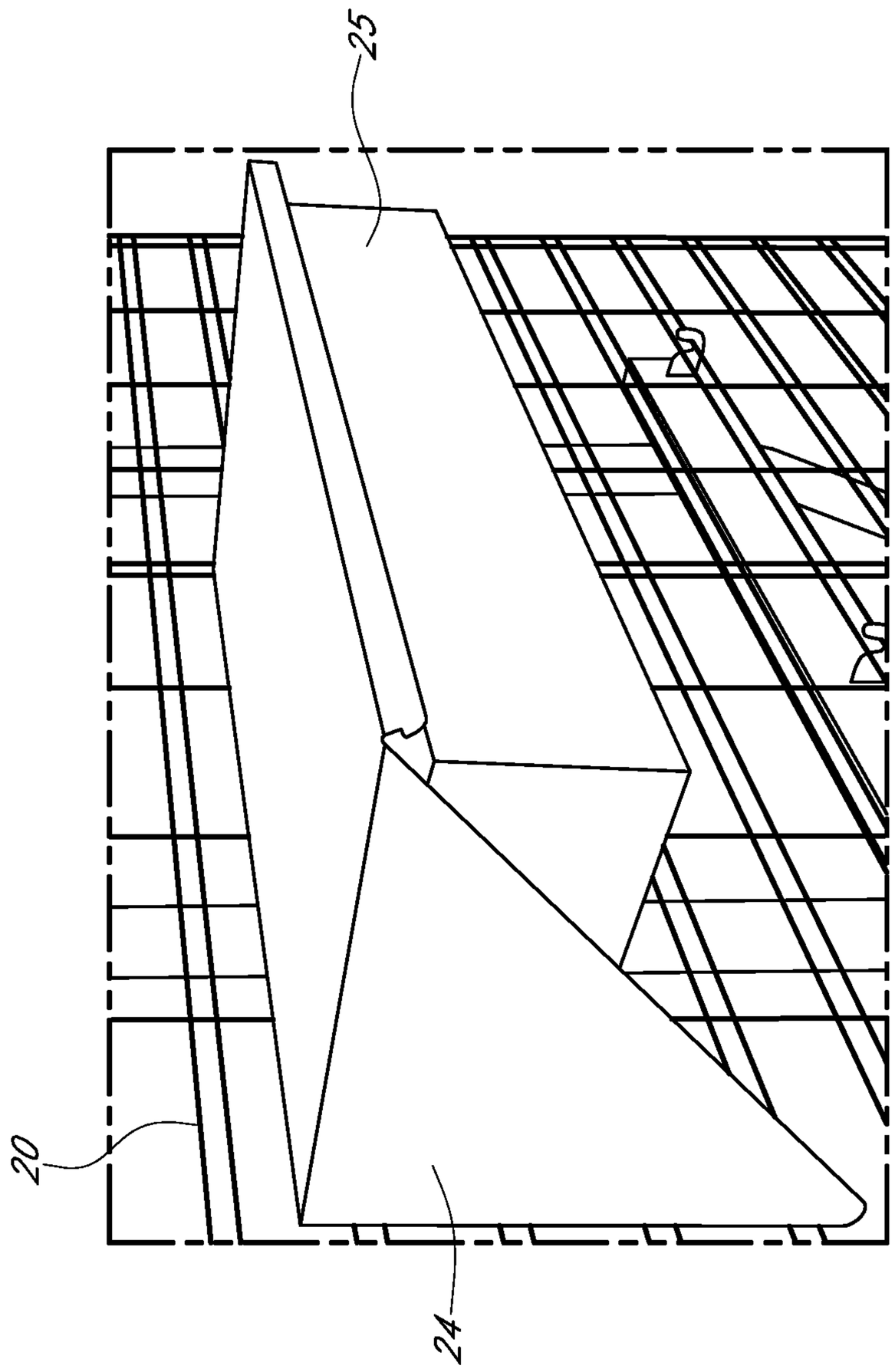


FIG. 8

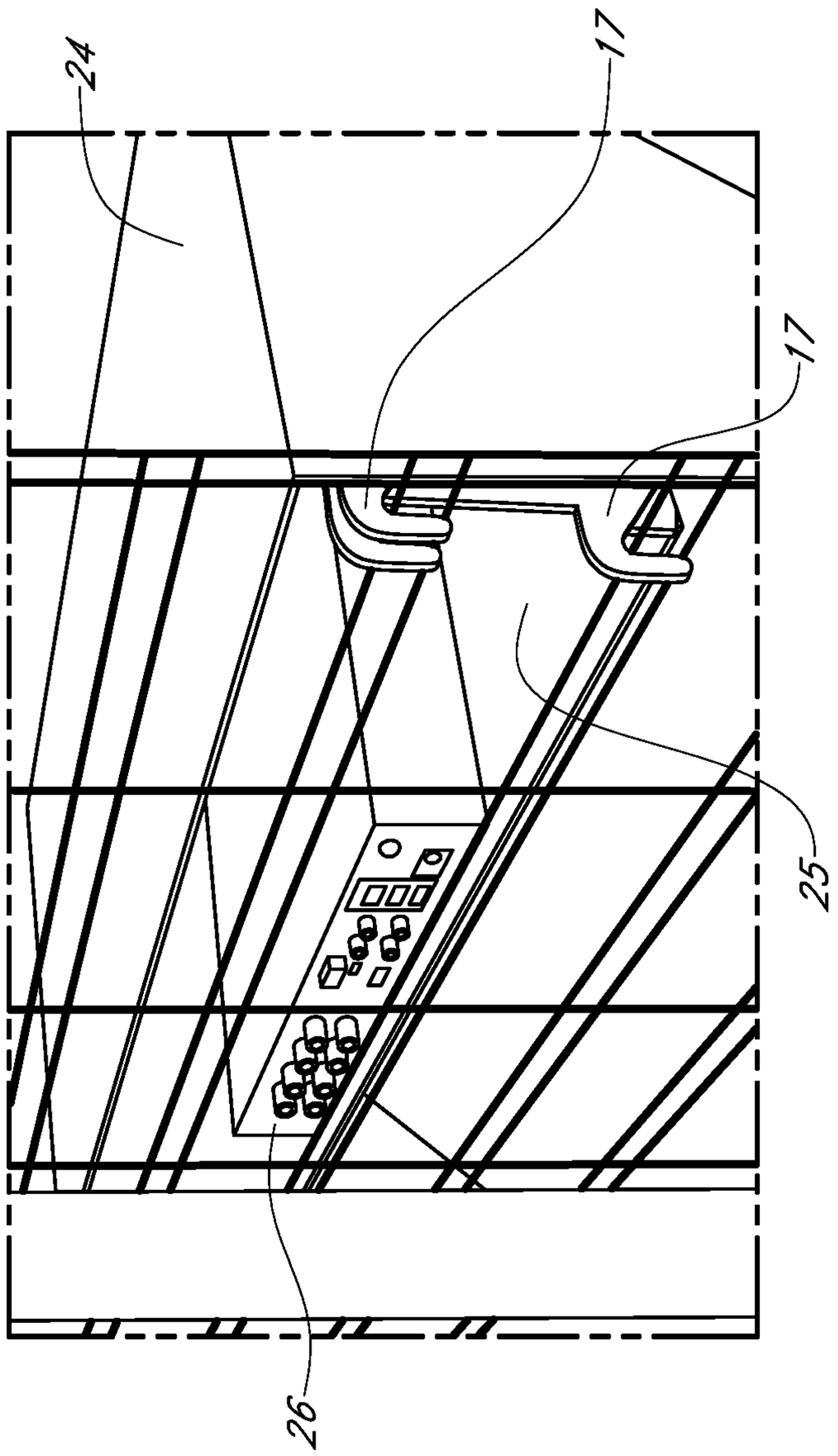


FIG. 8A

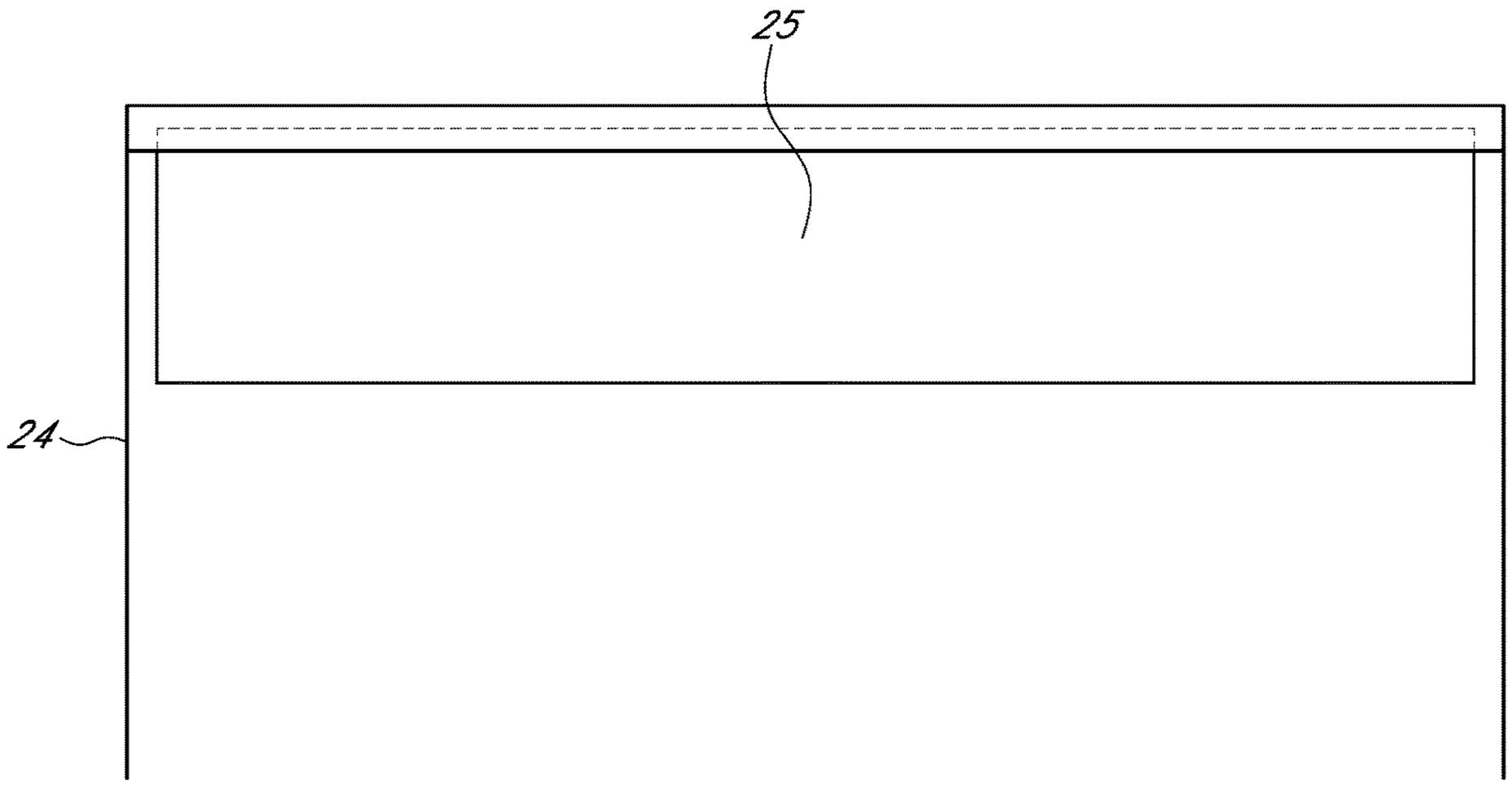


FIG. 8B

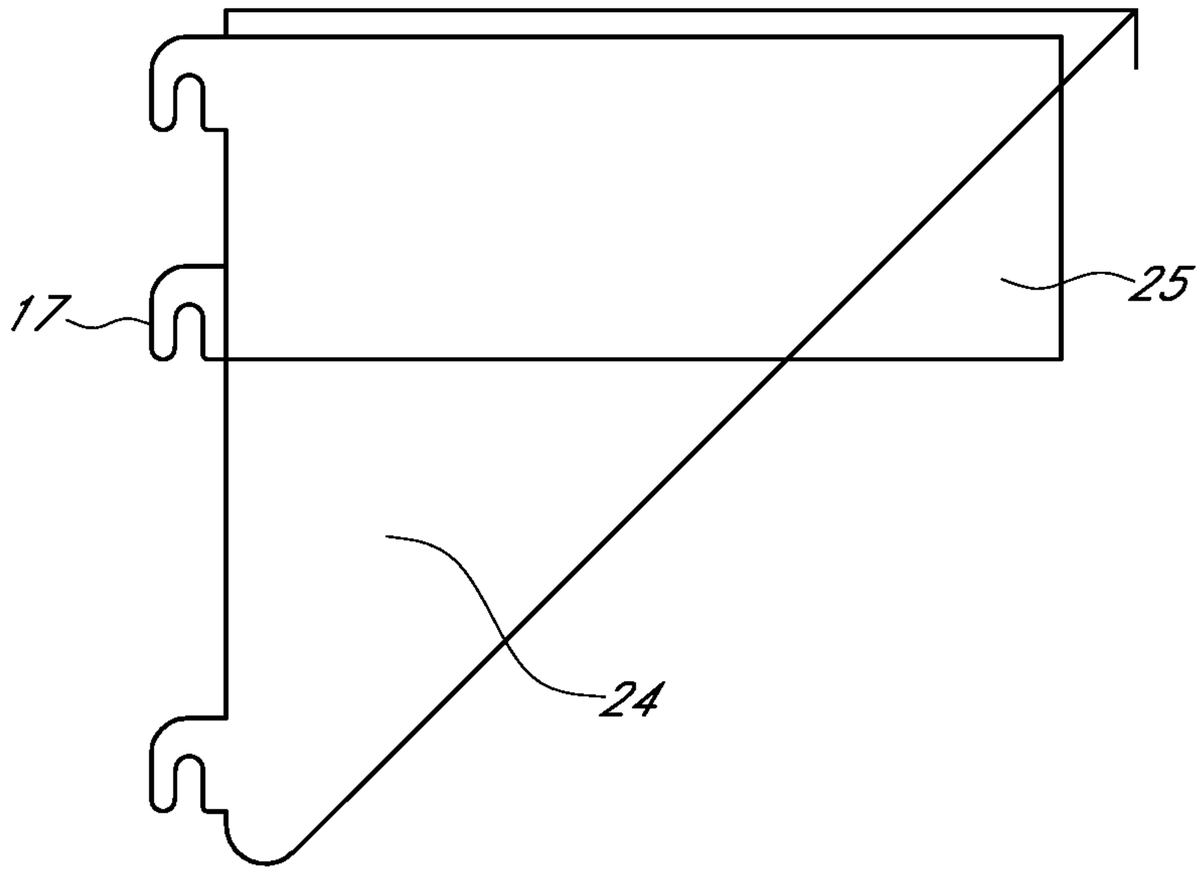
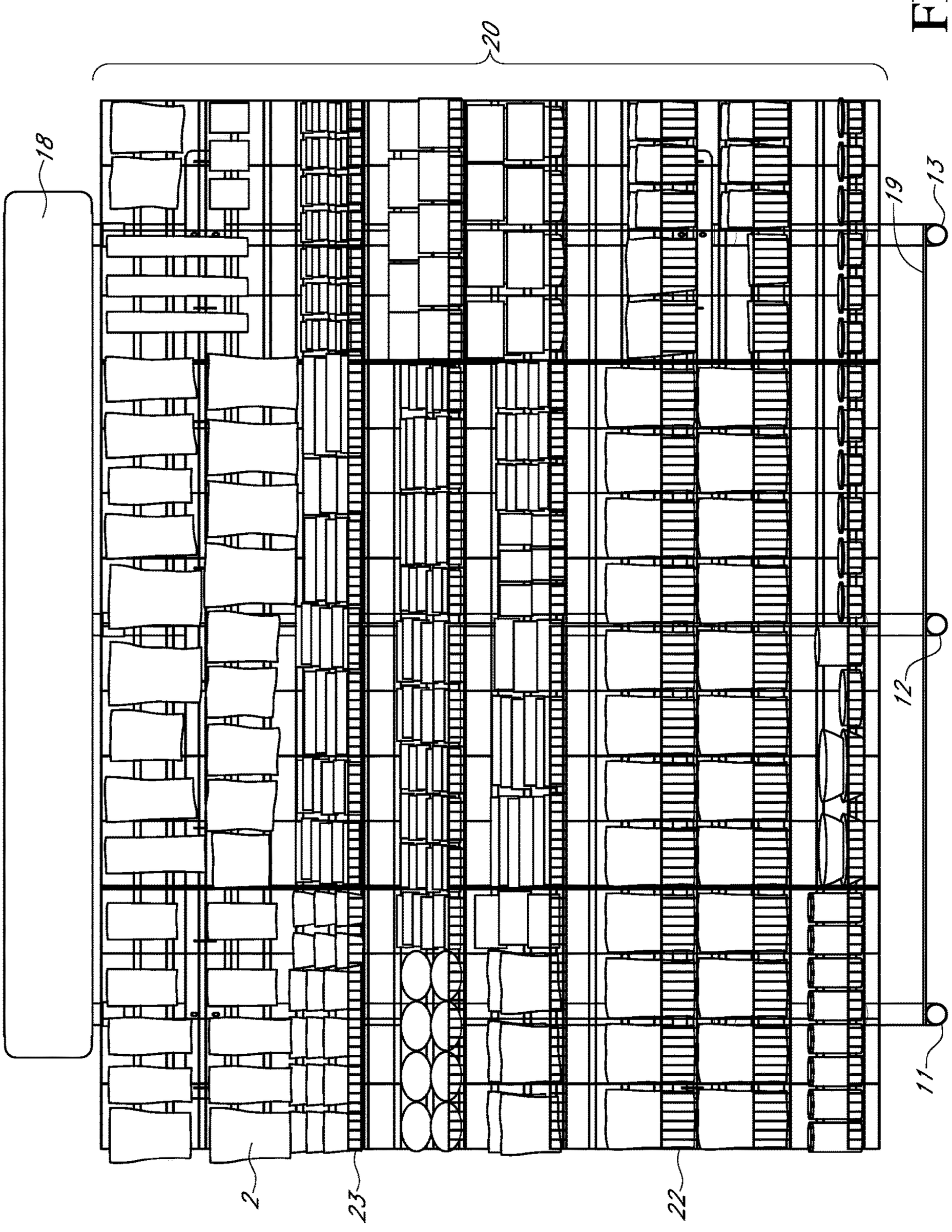


FIG. 8C

FIG. 9



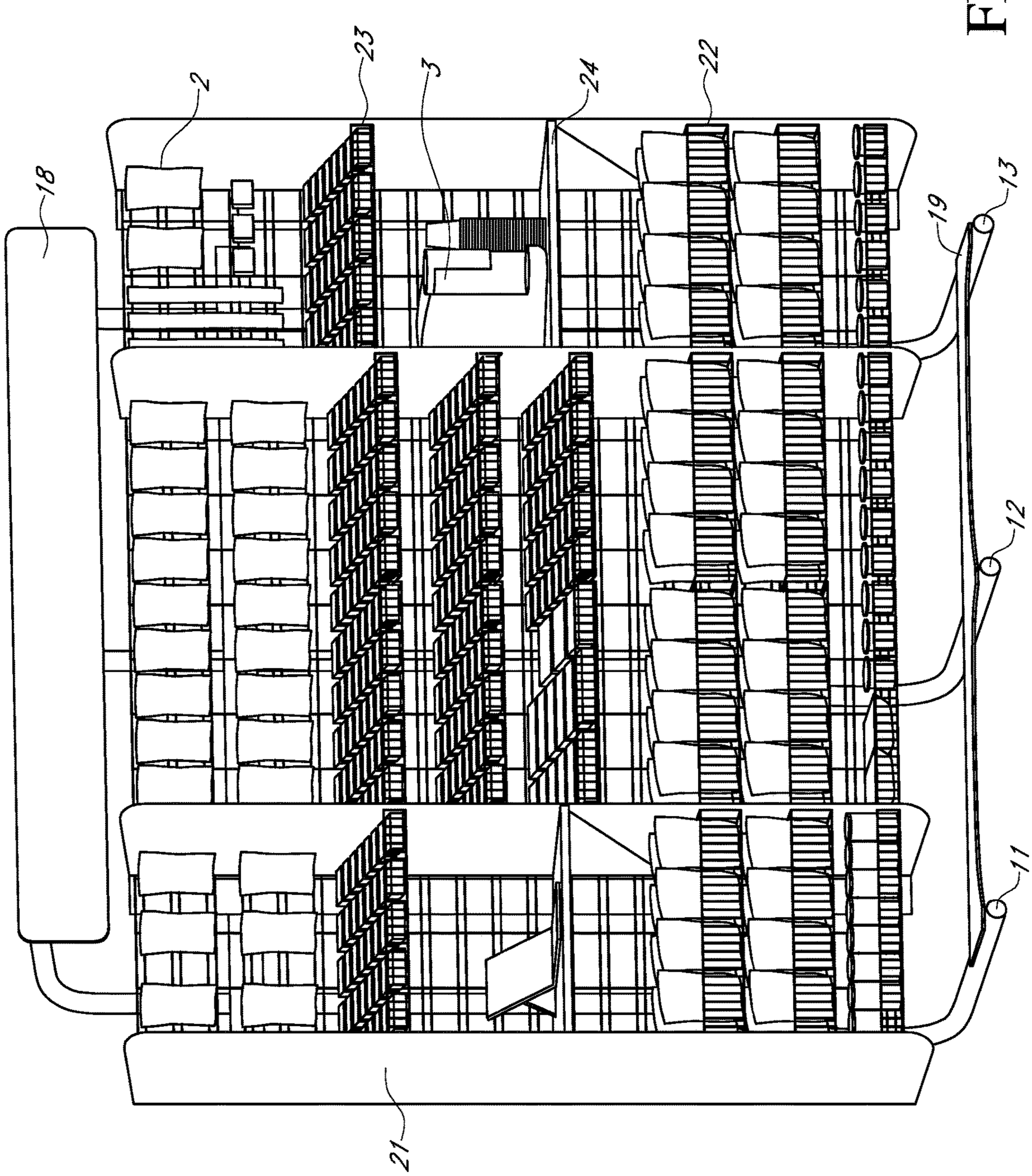


FIG. 9A

SELF-STANDING MERCHANDISE FRAME

CROSS REFERENCE TO RELATED APPLICATIONS

The present application claims priority from utility provisional U.S. Pat. App. No. 62/663,692 filed on Apr. 27, 2018, which is incorporated by reference herein in its entirety.

FIELD OF THE INVENTION

The present disclosure relates to a self-standing merchandise frame for multiple racks having a sign plate and a self-support frame without any restriction and limitation, as shown and disclosed herein.

STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT

No federal funds were used to develop or create the invention disclosed and described in the patent application.

REFERENCE TO SEQUENCE LISTING, A TABLE, OR A COMPUTER PROGRAM LISTING COMPACT DISK APPENDIX

Not Applicable.

AUTHORIZATION PURSUANT TO 37 C.F.R. § 1.171 (d)(c)

A portion of the disclosure of this patent document may contain material that is subject to copyright and trademark protection. The copyright owner has no objection to the facsimile reproduction by anyone of the patent document or the patent disclosure, as it appears in the Patent and Trademark Office patent file or records, but otherwise reserves all copyrights whatsoever.

BRIEF DESCRIPTION OF THE DRAWINGS

The accompanying drawings, which are incorporated in and constitute a part of this specification, illustrate embodiments and together with the description, serve to explain and illustrate the principles of the Self-Standing Merchandise Frame as disclosed herein.

FIG. **1**A is a front view of a single stand of the Self-Standing Merchandise Frame (width of 24 inches) without the grid wall disclosed herein along with detailed call-outs for enablement of the present disclosure.

FIG. **1**B is a top view of a base plate of the Self-Standing Merchandise Frame positioned on the lower portion of the vertical tubes as shown in FIG. **1**A herein.

FIG. **1**C is a side view of the Self-Standing Merchandise Frame without the grid wall as shown in FIG. **1**A herein.

FIG. **1**D is a front view of the Self-Standing Merchandise Frame with the grid wall as shown in FIG. **1**C herein.

FIG. **1**E is a side view of the Self-Standing Merchandise Frame with the attachment of the grid wall to the horizontal tubes as shown in FIG. **1**D herein.

FIG. **1**F is a perspective view of the Self-Standing Merchandise Frame with the grid wall and the shelfs as shown herein.

FIG. **2**A is a front view of the Self-Standing Merchandise Frame (width of 48 inches) without the grid wall as shown herein.

FIG. **2**B is a top view of a base plate of the Self-Standing Merchandise Frame positioned on the lower portion of the vertical tubes as shown herein.

FIG. **2**C is a side view of the Self-Standing Merchandise Frame without the grid wall as shown in FIG. **2**A herein.

FIG. **2**D is a front view of the Self-Standing Merchandise Frame with the grid wall attached to the upper support and the lower support as shown and disclosed.

FIG. **2**E is a side view of the Self-Standing Merchandise Frame with the grid wall as shown in FIG. **2**D herein.

FIG. **2**F is a perspective view of the Self-Standing Merchandise Frame with the grid wall as shown in FIG. **2**D herein.

FIG. **3**A is a front view of the Self-Standing Merchandise Frame (width of 96 inches) without the grid wall as shown herein.

FIG. **3**B is a top view of a base plate of the Self-Standing Merchandise Frame positioned on the lower portion of the vertical tubes as shown herein.

FIG. **3**C is a side view of the Self-Standing Merchandise Frame without the grid wall as shown in FIG. **3**A herein.

FIG. **3**D is a front view of the Self-Standing Merchandise Frame with the grid wall attached to the horizontal tubes as shown and disclosed.

FIG. **3**E is a side view of the Self-Standing Merchandise Frame with the grid wall as shown in FIG. **3**D herein.

FIG. **3**F is a perspective view of the Self-Standing Merchandise Frame with the grid wall as shown in FIG. **3**D herein.

FIG. **4**A is a side perspective view of a small side panel in full extension positioned in the middle portion of the Self-Standing Merchandise Frame as shown and disclosed herein.

FIG. **4**B is a side perspective view of a small side panel in full extension positioned in the upper portion of the Self-Standing Merchandise Frame as shown and disclosed herein.

FIG. **4**C is a side perspective view of a small side panel in half extension positioned in the middle portion of the Self-Standing Merchandise Frame as shown and disclosed herein.

FIG. **4**D is a side perspective view of a small side panel in half extension positioned in the upper portion of the Self-Standing Merchandise Frame as shown and disclosed herein.

FIG. **5**A is a side perspective view of a medium side panel in full extension positioned in the middle portion of the Self-Standing Merchandise Frame as shown and disclosed herein.

FIG. **5**B is a side perspective view of a medium side panel in full extension positioned in the upper portion of the Self-Standing Merchandise Frame as shown and disclosed herein.

FIG. **5**C is a side perspective view of a medium side panel in half extension positioned in the middle portion of the Self-Standing Merchandise Frame as shown and disclosed herein.

FIG. **5**D is a side perspective view of a medium side panel in half extension positioned in the upper portion of the Self-Standing Merchandise Frame as shown and disclosed herein.

FIG. **6**A is a side perspective view of a large side panel in full extension of the Self-Standing Merchandise Frame as shown and disclosed herein.

FIG. **6**B is a side perspective view of a large side panel in half extension of the Self-Standing Merchandise Frame as shown and disclosed herein.

FIG. **7** is a perspective view of a shelf of the Self-Standing Merchandise Frame as disclosed herein.

FIG. **8** is a front perspective view of the Self-Standing Merchandise Frame having a shelf and a secure access box as disclosed herein.

FIG. **8**A is a rear perspective view of the Self-Standing Merchandise Frame having a shelf and a secure access box as disclosed herein.

FIG. **8**B is a front view of the Self-Standing Merchandise Frame having a shelf and a secure access box as disclosed herein.

FIG. **8**C is a side view of the Self-Standing Merchandise Frame having a shelf and a secure access box as disclosed herein.

FIG. **9** is a perspective view of the Self-Standing Merchandise Frame displaying different products as disclosed herein.

FIG. **9**A is a perspective view of the Self-Standing Merchandise Frame as disclosed in FIG. **9** wherein multiple side panels for product separation have been added.

Appendix A is included herein and provides additional inventor disclosure and description for implementation, as provided by the inventor for inclusion herein, and may be claimed in whole or in part, for its use in the implementation of the present disclosure and is fully incorporated by reference herein.

DETAILED DESCRIPTION—TABLE OF ELEMENTS

Element Description	Element Number
Wall (not shown)	1
Merchandise products (Snacks, candies, gums, etc.)	2
Coffee maker	3
Screw	4
Bolt	5
Mounting bracket	6
Self-standing merchandise frame	10
First vertical tube	11
Upper portion	11a
Upper curved radius	11a-1
Middle portion	11b
Lower portion	11c
Angled portion	11c-1
Lower curved radius	11c-2
First end	11d
Second end	11e
Hole (not shown)	11f
Slot (not shown)	11g
Second vertical tube	12
Upper portion	12a
Upper curved radius	12a-1
Middle portion	12b
Lower portion	12c
Angled portion	12c-1
Lower curved radius	12c-2
First end	12d
Second end	12e
Hole (not shown)	12f
Slot (not shown)	12g
Third vertical tube	13
Upper portion	13a
Upper curved radius	13a-1
Middle portion	13b
Lower portion	13c
Angled portion	13c-1
Lower curved radius	13c-2
First end	13d
Second end	13e
Hole (not shown)	13f

-continued

Element Description	Element Number
Slot (not shown)	13g
Upper support	14
Slot (for attachment of the grid wall)	14a
Hole (for attachment of the vertical tubes)	14b
Lower support	15
Slot (for attachment of the grid wall)	15a
Hole (for attachment of the vertical tubes)	15b
Mounting bracket support hook	16
Hook	17
Sign plate	18
Base plate	19
Grid wall	20
Upper portion	20a
Middle portion	20b
Lower portion	20c
Side panel	21
Small side panel	21a
Medium side panel	21b
Large side panel	21c
Basket	22
Rack	23
Shelf	24
Secure access box	25
DVR	26
Floor surface (not shown)	27
Extender arm (not shown)	30

DETAILED DESCRIPTION

Before the present methods and apparatuses are disclosed and described, it is to be understood that the methods and apparatuses are not limited to specific methods, specific components, or to particular implementations. It is also to be understood that the terminology used herein is for the purpose of describing particular embodiments only and is not intended to be limiting.

As used in the specification and the appended claims, the singular forms "a," "an," and "the" include plural referents unless the context clearly dictates otherwise. Ranges may be expressed herein as from "about" one particular value, and/or to "about" another particular value. When such a range is expressed, another embodiment includes—from the one particular value and/or to the other particular value. Similarly, when values are expressed as approximations, by use of the antecedent "about," it will be understood that the particular value forms another embodiment. It will be further understood that the endpoints of each of the ranges are significant both in relation to the other endpoint, and independently of the other endpoint.

"Optional" or "optionally" means that the subsequently described event or circumstance may or may not occur, and that the description includes instances where said event or circumstance occurs and instances where it does not.

Throughout the description and claims of this specification, the word "comprise" and variations of the word, such as "comprising" and "comprises," means "including but not limited to," and is not intended to exclude, for example, other components, integers or steps. "Exemplary" means "an example of" and is not intended to convey an indication of a preferred or ideal embodiment. "Such as" is not used in a restrictive sense, but for explanatory purposes.

Disclosed are components that can be used to perform the disclosed methods and apparatuses. These and other components are disclosed herein, and it is understood that when combinations, subsets, interactions, groups, etc. of these components are disclosed that while specific reference of each various individual and collective combinations and permutation of these may not be explicitly disclosed, each is specifically contemplated and described herein, for all methods and apparatuses. This applies to all aspects of this application including, but not limited to, steps in disclosed methods. Thus, if there are a variety of additional steps that can be performed it is understood that each of these additional steps can be performed with any specific embodiment or combination of embodiments of the disclosed methods.

The present methods and apparatuses may be understood more readily by reference to the following detailed description of preferred aspects and the examples included therein and to the Figures and their previous and following description.

Before the various embodiments of the present invention are explained in detail, it is to be understood that the invention is not limited in its application to the details of construction and the arrangements of components set forth in the following description. The invention is capable of other embodiments and of being practiced or of being carried out in various ways. Also, it is to be understood that phraseology and terminology used herein with reference to device or element orientation (such as, for example, terms like "front", "back", "up", "down", "top", "bottom", and the like) are only used to simplify description of the present invention, and do not alone indicate or imply that the device or element referred to must have a particular orientation. In addition, terms such as "first", "second", and "third" are used herein and in the appended claims for purposes of description and are not intended to indicate or imply relative importance or significance.

The following detailed description is of the best currently contemplated modes of carrying out illustrative embodiments of the invention. The description is not to be taken in a limiting sense, but is made merely for the purpose of illustrating the general principles of the invention, since the scope of the invention is best defined by the appending claims. Various inventive features are described below herein that can each be used independently of one another or in combination with other features.

Products or merchandise products of various types and sizes are commonly displayed on the shelves in the stores, gas station, supermarket, etc. which allow the customer to see and grasp the products or merchandise products directly from the shelves or merchandise display rack. The display of the merchandise units on the merchandise shelves or merchandise racks allow the customer to select the products more easily; thus, increases the customer's interest of purchasing.

The illustrative embodiment of a self-standing merchandise frame may be configured with a sign plate, a first vertical tube, a second vertical tube, a third vertical tube, an upper support, a lower support and a base plate. The first, second and third vertical tubes are configured to support the self-standing mechanism. The upper support and the lower support are configured to engage with a grid wall. The grid wall allows the attachment of multiple shelves, racks or baskets to be attached to the self-standing merchandise frame. The present embodiment provides a simple, inexpensive structure for merchandise display which is constructed of a minimum of parts and which can be quickly assembled and disassembled.

In addition, the present disclosure details a self-standing merchandise frame that overcomes various disadvantages and otherwise undesirable features of the prior art. In addition, the illustrative embodiment of a self-standing merchandise frame may solve numerous problems associated with prior art merchandise display and storage. For instance, the problem of having a wall to support the standing of the merchandise frame may be solved by a frame having at least one vertical tube wherein the vertical tube has an upper curved radius and a lower curved radius to allow a self-standing merchandise frame. The problem of having limited display space in prior art merchandise frames may be solved by having multiple display units, exemplified as a hook, a shelf, a basket, a tray and or a rack, or a combination therein, attached to a grid wall. The problem of complicated construction, numerous parts, and expense of prior art merchandise frames may be solved by the self-standing merchandise frame disclosed and claimed herein which is easy to assemble, store and transport and may be configured in a multitude of ways.

Illustrative Embodiment and Advantages

The present disclosure relates to a self-standing merchandise frame **10**. FIG. **1**A is a front view of a single stand of the self-standing merchandise frame **10** (width of 24 inches) disclosed herein along with detailed call-outs for enablement of the present disclosure. FIG. **1**B is a top view of a base plate **19** of the self-standing merchandise frame **10** positioned on the lower portion of the vertical tubes as shown in FIG. **1**A herein. FIG. **1**C is a side view of the self-standing merchandise frame **10** without the grid wall **19** as shown in FIG. **1**A herein. FIG. **1**D is a front view of the self-standing merchandise frame **10** with the grid wall **20** as shown in FIG. **1**C herein. FIG. **1**E is a side view of the self-standing merchandise frame **10** with the attachment of the grid wall **20** to the upper support **14** and the lower support **15** as shown in FIG. **1**D herein. FIG. **1**F is a perspective view of the Self-standing merchandise frame **10** with the attachment of the grid wall **20** and the shelfs **24** as shown herein.

In one embodiment, referring to FIG. **1**A-**1**F, the self-standing merchandise frame **10** is configured with a sign plate **18**, an upper support **14**, a lower support **15**, a first vertical tube **11**, a second vertical tube **12**, a third vertical tube **13** and a base plate **19**. As shown, the sign plate **18** is configured to engage with a first end **11***d* of the first vertical tube. In one embodiment, the first end **11***d* of the first vertical tube may be positioned to align with the second end **11***e* of the first vertical tube (as shown in FIG. **1**C) but in another embodiment, it may be constructed to be positioned proximate the vertical tubes for a better merchandise display (not shown). The first vertical tube **11** is configured with an upper portion **11***a*, a middle portion **11***b* and a lower portion **11***c* wherein the upper portion **11***a* of the first vertical tube is configured to engage with the sign plate **18** and the lower portion **11***c* of the first vertical tube is configured to engage with the base plate **19**. The middle portion **11***b* of the first vertical tube has an upper curved radius **11***a*-**1** transiting to the upper portion **11***a* of the first vertical tube. The middle portion **11***b* of the first vertical tube has an angled portion **11***c*-**1** and a lower curved radius **11***c*-**2** transiting to the lower portion **11***c* of the first vertical tube. The second vertical tube **12** is configured with an upper portion **12***a*, a middle portion **12***b* and a lower portion **12***c* wherein the upper portion **12***a* of the second vertical tube terminates below the upper portion **11***a* of the first vertical tube and the middle portion **12***b* of the second vertical tube has an angled portion **12***c*-**1**

and a lower curved radius **12***c*-**2** transitioning to the lower portion **12***b* of the second vertical tube. The third vertical tube **13** is configured with an upper portion **13***a*, a middle portion **13***b* and a lower portion **13***c* wherein the upper portion **13***a* of the third vertical tube terminates below the upper portion **11***a* of the first vertical tube and the middle portion **13***b* of the third vertical tube has an angled portion **13***c*-**1** and a lower curved radius **13***c*-**2** transitioning to the lower portion **13***c* of the third vertical tube. The second vertical tube **12** and the third vertical tube **13** are configured to provide balance and structural support to allow the merchandise frame **10** to be self-standing.

The lower portion of the first **11***c*, the second **12***c* and the third **13***c* vertical tubes are configured to engage with the floor surface **27** (not shown) and provide structural support for the self-standing merchandise frame **10**. The base plate **19** is configured to engage with and position on top of the lower portion of the first **11***c*, the second **12***c* and the third **13***c* vertical tubes to secure and provide further structural support to the self-standing merchandise frame **10**.

The upper portion **11***a* of the first vertical tube (as shown in FIG. **1**C) is parallel with the lower portion **11***c* of the first vertical tube to provide more stability and more structural support to the self-standing merchandise frame **10**. Dependent on the particular application, the angle between the upper portion **11***a* and the lower portion **11***c* of the first vertical tube may be customized between the range of 0 degrees (same direction with each other) to 180 degrees (opposite direction with each other), without any limitation and or restriction. As shown in FIGS. **1**A-**1**F, the angle between the upper portion **11***a* of the first vertical tube and the lower portion **11***c* of the first vertical tube is 0 (zero) degrees.

As shown in FIG. **1**C, the angle of the upper curved radius **11***a*-**1** and the lower curved radius **11***c*-**1** of the first vertical tube is approximately 160 degrees but not limited to any value between a range of 100-360 degrees. The radius of the upper curved radius **11***a*-**1** and the lower curved radius **11***c*-**1** of the first vertical tube is approximately 5 inches, but not limited to any value between a range of 4-10 inches. The angle of the lower curved radius of the second **12***c*-**1** and the third **13***c*-**1** vertical tubes is approximately 160 degrees but not limited to any value between a range of 100-360 degrees. The radius of the lower curved radius of the second **12***c*-**1** and the third **13***c*-**1** vertical tubes is approximately 5 inches, but not limited to any value between a range of 4-10 inches. One of ordinary skill will appreciate that the angle and the radius of the upper curved radius and the lower curved radius of each vertical tube can be customized to as suitable for a particular application to support the self-standing of the embodiment without any limitation and/or restriction unless otherwise indicated in the following claims.

The upper support **14** and the lower support **15** are configured for attachment along the length of the first vertical tube **11**. The upper support **14** is configured for horizontal attachment to the lower portion **11***c* of the first vertical tube. The upper support **14** may be secured to the first vertical tube **11** by inserting a screw **4**, a bolt **5** or a mounting bracket **6** to at least one hole **11***f* on the first vertical tube **11**(not shown). The upper support **14** is positioned proximate to the upper curved radius **11***a*-**1** of the first vertical tube. The lower support **15** is configured for horizontal attachment between the first **11**, the second **12** and the third **13** vertical tubes. The lower support **15** may be secured to the first **11**, the second **12** and the third **13** vertical tubes by inserting a screw **4**, a bolt **5** or a mounting bracket **6** to at least one hole on each of the first **11***f*, the second **12***f* and the third **13***f* vertical tubes (not shown). The lower support **15** positions proximately to the lower curved radius of the first **11***c*-**1**, the second **12***c*-**1** and third **13***c*-**1** vertical tubes. One of ordinary skill will appreciate that the upper support **14** and the lower support **15** are removable which allows the self-standing merchandise frame **10** to be disassembled during transportation and storage. One of ordinary skill will also appreciate that each vertical tube is configured of at least two holes (**11***f*, **12***f*, **13***f*—not shown) and or at least two slots (**11***g*, **12***g*, **13***g*—not shown) along the length of each of the vertical tubes which allows the upper support **14** and the lower support **15** to be adjustable in height. One of ordinary skill will appreciate that the embodiments disclosed herein may also be produced to have the various elements permanently affixed, i.e. welding the upper support **14** and the lower support **15** to the vertical tubes (not shown), or producing the various components using a one-piece integral type construction from either metal or plastic (not shown), as suitable to a particular application, without departure from the spirit of the application as disclosed herein.

Another feature of the embodiment is the grid wall **20** (as shown in FIGS. **1**D-**1**F). The grid wall **20** is configured for attachment to and between the upper support **14** and the lower support **15** wherein the upper support **14** is attached to the upper portion **11***a* of the first vertical tube and the lower support **15** is attached to the lower portion **11***c* of the first vertical tube, the upper portion **12***a* of the second vertical tube and the upper portion **13***a*. The grid wall **20** may be secured to the upper support **14** and the lower support **15** by inserting a screw **4**, a bolt **5** or a mounting bracket **6** to a pair of slots on the upper support **14***a* and the lower support **15***a* (not shown). One of ordinary skill will appreciate that the grid wall **20** is removable which allows the self-standing merchandise frame **10** to be disassembled during transportation and storage. The upper support **14** and the lower support **15** are configured with at least one slot (**14***a* and **15***a*, respectively) for better attachment and securing of the grid wall **20** to the self-standing merchandise frame **10**. As shown, upper support **14** and lower support **15** are configured with a first and a second mounting support hooks **16** to engage and support the back of the grid wall **20**. The grid wall **20** is configured for attachment of multiple hooks, racks **23**, shelves **24**, trays, baskets **22** and/or side panels **21** for display different types of merchandise units and for merchandise separation (as shown in FIG. **1**F). The grid wall **20** may be constructed of, but not limited to, a metal, such as steel, bronze and aluminum, or a combination therein, or some other solid, durable, hard material, such as plastic or wood, or a combination thereof, without departure from the spirit of the present application as disclosed herein.

FIG. **2**A is a front view of the self-standing merchandise frame **10** (width of 48 inches) without the grid wall **20** as shown herein. FIG. **2**B is a top view of a base plate **19** of the self-standing merchandise frame **10** positioned on the lower portion of the vertical tubes as shown herein. FIG. **2**C is a side view of the self-standing merchandise frame **10** without the grid wall as shown in FIG. **2**A herein. FIG. **2**D is a front view of the self-standing merchandise frame **10** with the grid wall **20** attached to the upper support **14** and the lower support **15** as shown and disclosed. FIG. **2**E is a side view of the self-standing merchandise frame **10** with the grid wall **20** as shown in FIG. **2**D herein. FIG. **2**F is a perspective view of the self-standing merchandise frame **10** with the grid wall **20** as shown in FIG. **2**D herein.

In another embodiment as shown in FIG. **2**A-**2**F, the self-standing merchandise frame **10** is configured with a sign plate **18**, an upper support **14**, a lower support **15**, a first

vertical tube **11**, a second vertical tube **12** and a base plate **19**. As shown, the sign plate **18** is configured to engage with a first end **11***d* of the first vertical tube and a first end **12***d* of the second vertical tube. In one embodiment, the first end of the first **11***d* and the second **12***d* vertical tubes may be positioned to align with the second end of the first **11***e* and the second **12***e* vertical tubes (as shown in FIG. **2**C) but in another embodiment, it may be constructed to be positioned proximate the vertical tubes for a better merchandise display (not shown). The first vertical tube **11** is configured with an upper portion **11***a*, a middle portion **11***b* and a lower portion **11***c* wherein the upper portion **11***a* of the first vertical tube is configured to engage with the sign plate **18** and the lower portion **11***c* of the first vertical tube is configured to engage with the base plate **19**. The middle portion **11***b* of the first vertical tube has an upper curved radius **11***a*-**1** transiting to the upper portion **11***a* of the first vertical tube and a lower curved radius **11***c*-**2** transiting to the lower portion **11***c* of the first vertical tube. The second vertical tube **12** is configured with an upper portion **12***a*, a middle portion **12***b* and a lower portion **12***c* wherein the upper portion **12***a* of the second vertical tube **12** is configured to engage with the sign plate **18** and the lower portion **12***c* of the second vertical tube **12** is configured to engage with the base plate **19**. The middle portion **12***b* of the second vertical tube **12** has an upper curved radius **12***a*-**1** transiting to the upper portion **12***a* of the second vertical tube **12** and a lower curved radius **12***c*-**2** transiting to the lower portion **12***c* of the second vertical tube **12**. The lower portion **12***c* of the first vertical tube **11** and the second vertical tube **12** are configured to engage with the floor or ground surface **27** (not shown) and provide structural support for the self-standing merchandise frame **10**. The base plate **19** is configured to engage with and be positioned on top of the lower portion of the first **11** and the second **12** vertical tubes for securement to provide further structural support to the entire merchandise frame **10**.

The upper portion **11***a* of the first vertical tube (as shown in FIG. **2**C) is parallel with the lower portion **11***c* of the first vertical tube to provide the balance and more structural support to the merchandise frame **10**. Dependent on the particular application, the angle between the upper portion **11***a* and the lower portion **11***c* of the first vertical tube may be customized between the range of 0 degree (same direction with each other) to 180 degrees (opposite direction with each other), without any limitation and or restriction. The upper portion **12***a* of the second vertical tube (not shown) is parallel with the lower portion **12***c* of the second vertical tube to improve the balance and provide structural support to the frame. As shown in FIGS. **2**A-**2**F, the angle between the upper portion **11***a* of the first vertical tube and the lower portion **11***c* of the first vertical tube is 0 (zero) degrees. Dependent on the particular application, the angle between the upper portion **12***a* and the lower portion **12***c* of the second vertical tube **12** may be customized between the range of 0 degree (same direction with each other) to 180 degrees (opposite direction with each other), without any limitation and or restriction. As shown in FIGS. **2**A-**2**F, the angle between the upper portion **12***a* of the second vertical tube and the lower portion **12***c* of the second vertical tube is 0 (zero) degrees.

As shown in FIG. **2**C, the angle of the upper curved radius **12***a*-**1** and the lower curved radius **12***c*-**2** of the second vertical tube is approximately 160 degrees but not limited to any value between a range of 100-360 degrees. The radius of the upper curved radius **12***a*-**1** and the lower curved radius **12***c*-**2** of the second vertical tube is approximately 5 inches, but not limited to any value between a range of 4-10 inches. Although not shown, the angle of the upper curved radius **11***a*-**1** and the lower curved radius **11***c*-**2** of the first vertical tube is approximately 160 degrees but not limited to any value between a range of 100-360 degrees. The radius of the upper curved radius **11***a*-**1** and the lower curved radius **11***c*-**2** of the first vertical tube is approximately 5 inches, but not limited to any value between a range of 4-10 inches. One of ordinary skill will appreciate that the angle and the radius of the upper curved radius (**11***a*-**1**, **12***a*-**1**, **13***a*-**1**, respectively) and the lower curved radius (**11***c*-**2**, **12***c*-**2**, **13***c*-**2**, respectively) of each vertical tube can be customized to as suitable for a particular application to support the self-standing of the embodiment without any limitation and/or restriction unless otherwise indicated in the following claims.

The upper support **14** and the lower support **15** are configured for attachment along the length of the first **11** and the second **12** vertical tubes. The upper support **14** is configured for horizontal attachment to the upper portion **11***a* of the first vertical tube and the upper portion **12***a* the second vertical tubes. The upper support **14** may be secured to the first **11** and the second **12** vertical tubes by inserting a screw **4**, a bolt **5** or a mounting bracket **6** to at least one hole **11***f* on the first vertical tube **11** and at least one hole **12***f* on the second vertical tube **12**. The upper support **14** positions proximately to the upper curved radius (**11***a*-**1**, **12***a*-**1**, respectively) of the first and the second vertical tubes. The lower support **15** is configured for horizontal attachment between the first **11** and the second **12** vertical tubes. The lower support **15** is configured for horizontal attachment between the first **11** and the second **12** vertical tubes. The lower support **15** may be secured to the first **11** and the second **12** vertical tubes by inserting a screw **4**, a bolt **5** or a mounting bracket **6** to at least one hole on the first **11***f* and the second **12***f* vertical tubes. The lower support **15** positions proximately to the lower curved radius of the first **11***c*-**2** and the second **12***c*-**2** vertical tubes. One of ordinary skill will appreciate that the upper support **14** and the lower support **15** are removable which allows the self-standing merchandise frame **10** to be disassembled during transportation and storage. One of ordinary skill will also appreciate that each vertical tube is configured of at least two holes (**11***f*, **12***f*, **13***f*, respectively) along the length of each of the vertical tube which allows the upper support **14** and the lower support **15** to be adjustable in height. One of ordinary skill will appreciate that the embodiments disclosed herein may also be produced to have the various elements permanently affixed, i.e. welding the horizontal supports to the vertical tubes (not shown), or producing the various components using a one-piece integral type construction from either metal or plastic (not shown), as suitable to a particular application, without departure from the spirit of the application as disclosed herein.

Another feature of the embodiment is the grid wall **20** (as shown in FIGS. **2**D-**2**F). The grid wall **20** is configured for attachment to and between the upper support **14** and the lower support **15** wherein the upper support **14** and the lower support **15** are attached to the first **11** and the second **12** vertical tubes. The grid wall **20** may be secured to the upper support **14** and the lower support **15** by inserting a screw **4**, a bolt **5** or a mounting bracket **6** to at least one slot **14***a* on the upper support and at least one slot **15***a* on the lower support. One of ordinary skill will appreciate that the grid wall **20** is removable which allows the self-standing merchandise frame **10** to be disassembled during transportation and storage. The upper support **14** and the lower support **15** are configured with at least one slot (**14***a* and **15***a*, respectively) for better attachment and securing of the grid wall **20**

to the self-standing merchandise frame **10**. The grid wall **20** is configured for attachment of multiple racks **23**, shelfs **24**, baskets **22** and side panels **21** for display different types of merchandise units and merchandise separation (as shown in FIG. **2**F). The grid wall **20** may be constructed of, but not limited to, a metal, such as steel, bronze and aluminum, or a combination therein, or some other solid, durable, hard material, such as plastic or wood, or a combination thereof, without departure from the spirit of the present application as disclosed herein.

FIG. **3**A is a front view of the self-standing merchandise frame **10** (width of 96 inches) without the grid wall **20** as shown herein. FIG. **3**B is a top view of a base plate **19** of the self-standing merchandise frame **10** positioned on the lower portion of the vertical tubes as shown herein. FIG. **3**C is a side view of the self-standing merchandise frame **10** without the grid wall **20** as shown in FIG. **3** herein. FIG. **3**D is a front view of the Self-standing merchandise frame **10** with the grid wall **20** attached to the upper support **14** and the lower support **15** as shown and disclosure. FIG. **3**E is a side view of the self-standing merchandise frame **10** with the grid wall **20** as shown in FIG. **3**C herein. FIG. **3**F is a perspective view of the self-standing merchandise frame **10** with the grid wall **20** as shown in FIG. **3**C herein.

In another embodiment as shown in FIG. **3**A-**3**F, the self-standing merchandise frame **10** is configured of a sign plate **18**, an upper support **14**, a lower support **15**, a first vertical tube **11**, a second vertical tube **12**, a third vertical tube **13** and a base plate **19**. As shown, the sign plate **18** is configured to engage with a first end of the first **11***d*, the second **12***d* and the third **13***d* vertical tubes. In one embodiment, the first end of the first **11**, the second **12** and the third **13** vertical tubes may be positioned to align with the second end of the first **11***e*, the second **12***e* and the third **13***e* vertical tubes (as shown in FIG. **3**C) but in another embodiment, it may be constructed to position proximately toward the vertical tubes for a better merchandise display **2** (not shown). The first vertical tube **11** is configured of an upper portion **11***a*, a middle portion **11***b* and a lower portion **11***c* wherein the upper portion **11***a* of the first vertical tube is configured to engage with the sign plate **18** and the lower portion **11***c* of the first vertical tube is configured to engage with the base plate **19**. The middle portion **11***b* of the first vertical tube has an upper curved radius **11***a*-**1** transiting to the upper portion **11***a* of the first vertical tube and a lower curved radius **11***c*-**2** transiting to the lower portion **11***c* of the first vertical tube. The second vertical tube **12** is configured of an upper portion **11***a*, a middle portion **11***b* and a lower portion **11***c* wherein the upper portion **11***a* of the second vertical tube **12** is configured to engage with the sign plate **18** and the lower portion **12***c* of the second vertical tube **12** is configured to engage with the base plate **19**. The middle portion **12***b* of the second vertical tube has an upper curved radius **12***a*-**1** transiting to the upper portion **12***a* of the second vertical tube and a lower curved radius **12***c*-**2** transiting to the lower portion **12***c* of the second vertical tube. The third vertical tube **13** is configured of an upper portion **12***a*, a middle portion **12***b* and a lower portion **12***c* wherein the upper portion **12***a* of the second vertical tube is configured to engage with the sign plate **18** and the lower portion **13***c* of the third vertical tube is configured to engage with the base plate **19**. The middle portion **13***b* of the third vertical tube has an upper curved radius **13***a*-**1** transiting to the upper portion **13***a* of the third vertical tube and a lower curved radius **13***c*-**2** transiting to the lower portion **13***c* of the third vertical tube. The lower portion **13***c* of the first **11**, the second **12** and the third **13** vertical tubes is configured to engage with the floor surface (not shown) **27** to provide structural support for the self-standing merchandise frame **10**. The base plate **19** is configured to engage with and position on top of the lower portion of the first **11***c*, the second **12***c* and the third **13***c* vertical tubes to secure and provide further structural support to the entire embodiment.

The upper portion **11***a* of the first vertical tube **11** (as shown in FIG. **3**C) is parallel with the lower portion **11***c* of the first vertical tube to provide the balance and more structural support to the merchandise frame **10**. Dependent on the particular application, the angle between the upper portion **11***a* and the lower portion **11***c* of the first vertical tube **11** may be customized between the range of 0 degree (same direction with each other) to 180 degrees (opposite direction with each other), without any limitation and or restriction. The upper portion **12***a* of the second vertical tube (not shown) is parallel with the lower portion **12***c* of the second vertical tube to provide more balance and more structural support to the frame. Dependent on the particular application, the angle between the upper portion **12***a* and the lower portion **12***c* of the second vertical tube may be customized between the range of 0 degree (same direction with each other) to 180 degrees (opposite direction with each other), without any limitation and or restriction. The upper portion **13***a* of the third vertical tube (not shown) is parallel with the lower portion **13***c* of the third vertical tube to provide more balance and more structural support to the merchandise frame **10**. Dependent on the particular application, the angle between the upper portion **13***a* and the lower portion **13***c* of the third vertical tube may be customized between the range of 0 degree (same direction with each other) to 180 degrees (opposite direction with each other), without any limitation and or restriction.

As shown in FIG. **3**C, the angle of the upper curved radius **11***a*-**1** and the lower curved radius **11***c*-**2** of the first vertical tube **11** is approximately 160 degrees but not limited to any value between a range of 100-360 degrees. The radius of the upper curved radius **11***a*-**1** and the lower curved radius **11***c*-**2** of the first vertical tube is approximately 5 inches, but not limited to any value between a range of 4-10 inches. The angle of the upper curved radius **12***a*-**1** and the lower curved radius **12***c*-**2** of the second vertical tubes is approximately 160 degrees but not limited to any value between a range of 100-360 degrees. The radius of the upper curved radius **12***a*-**1** and the lower curved radius **12***c*-**2** of the second vertical tube **12** is approximately 5 inches, but not limited to any value between a range of 4-10 inches. The angle of the upper curved radius **13***c*-**1** and the lower curved radius **13***c*-**2** of the third vertical tubes is approximately 160 degrees but not limited to any value between a range of 100-360 degrees. The radius of the upper curved radius **13***a*-**1** and the lower curved radius **13***c*-**2** of the third vertical tubes is approximately 5 inches, but not limited to any value between a range of 4-10 inches. One of ordinary skill will appreciate that the angle and the radius of the upper curved radius and the lower curved radius of each vertical tube can be customized to provide flexibility and structural support the self-standing of the embodiment without any limitation and/or restriction unless otherwise indicated in the following claims.

The upper support **14** and the lower support **15** are configured for attachment along the length of the first **11**, the second **12** and the third **13** vertical tubes. The upper support **14** is configured for horizontal attachment to the lower portion of the first **11***c*, the second **12***c* and the third **13***c* vertical tubes. The upper support **14** may be secured to the first **11**, the second **12** and the third **13** vertical tubes by inserting a screw **4**, a bolt **5** or a mounting bracket **6** to at

least one hole (**11***f*, **12***f*, **13***f*, respectively) on the first, the second and the third vertical tube. As shown in FIG. **3**C, the upper support **14** and the lower support **15** are attached to the first **11**, the second **12** and the third **13** vertical tubes via a bolt **5**. The upper support **14** positions proximately to the upper curved radius of the first **11***a*-**1**, the second **12***a*-**1** and the third **13***a*-**1** vertical tubes. The lower support **15** is configured for horizontal attachment between the first **11**, the second **12** and the third **13** vertical tubes. The lower support **15** may be secured to the first **11**, the second **12** and the third **13** vertical tubes by inserting a screw **4**, a bolt **5** or a mounting bracket **6** to at least one hole (**11***f*, **12***f*, **13***f*, respectively) on each of the first, the second and the third vertical tubes. The lower support **15** positions proximately to the lower curved radius of the first **11***c*-**2**, the second **12***c*-**2** and the third **13***c*-**2** vertical tubes. One of ordinary skill will appreciate that the upper support **14** and the lower support **15** are removable which allows the self-standing merchandise frame **10** to be disassembled during transportation and storage. One of ordinary skill will also appreciate that each vertical tube is configured of at least two holes (**11***f*, **12***f*, **13***f*, respectively) along the length of each of the vertical tubes which allows the upper support **14** and the lower support **15** to be adjustable in height. One of ordinary skill will appreciate that the embodiments disclosed herein may also be produced to have the various elements permanently affixed, i.e. welding the upper support **14** and the lower support **15** to the vertical tubes (not shown), or producing the various components using a one-piece integral type construction from either metal or plastic (not shown), as suitable to a particular application, without departure from the spirit of the application as disclosed herein.

Another feature of the embodiment is the grid wall **20** (as shown in FIGS. **3**D-**3**F). The grid wall **20** is configured for attachment to and between the upper support **14** and the lower support **15** wherein the upper support **14** and the lower support **15** are attached to the first **11**, the second **12** and the third **13** vertical tubes. The grid wall **20** may be secured to the upper support **14** and the lower support **15** by inserting a screw **4**, a bolt **5** or a mounting bracket **6** to a pair of slots on the upper support **14** and the lower support **15**. One of ordinary skill will appreciate that the grid wall **20** is removable which allows the self-standing merchandise frame **10** to be disassembled during transportation and storage. The upper support **14** and the lower support **15** are configured with at least one slot (**14***a* and **15***a*, respectively) for better attachment and securing of the grid wall **20** to the self-standing merchandise frame **10**. The grid wall **20** is configured for attachment of multiple hooks **17**, racks **23**, shelves **24**, trays, baskets **22** and/or side panels **21** for display different types of merchandise units and for merchandise separation (as shown in FIG. **3**F). The grid wall **20** may be constructed of, but not limited to, a metal, such as steel, bronze and aluminum, or a combination therein, or some other solid, durable, hard material, such as plastic or wood, or a combination thereof, without departure from the spirit of the present application as disclosed herein.

As shown in FIGS. **5**A-**5**D, the medium side panel **21***b* is configured for attachment along the length (vertical dimension) of the grid wall **20**. The medium side panel **21***b* may also be attached and positioned along the length of the grid wall **20** via a screw **4**, a bolt **5** or a mounting bracket **6** (not shown). Due to the medium size, the medium side panel **21***b* (in full extension) may be attached to an upper portion **20***a* (see FIG. **5**B), a middle portion **20***b* (see FIG. **5**A) or a lower portion **20***c* (not shown) of the grid wall **20**. In one embodiment, the medium side panel **21***b* (in half extension) may be attached to an upper portion **20***a* (see FIG. **5**D), a middle portion **20***b* (see FIG. **5**C) or a lower portion **20***c* (not shown) of the grid wall **20**. The medium side panel **21***b* is designed for multiple purposes such as merchandise separation, decoration, advertisement, etc. The medium side panel **21***b* is removable, light and adjustable which make it easy to use and convenient during transportation and storage. One of ordinary skill will appreciate that the medium side panel **21***b* can be adjusted and be positioned along the length (vertical dimension) of the grid wall **20**. One of ordinary skill will also appreciate that the medium side panel **21***b* can be adjusted and be positioned along the width (horizontal dimension) of the grid wall **20**, without any limitation and/or restriction unless otherwise indicated in the following claims.

Dependent on the specific application, the self-standing merchandise frame **10** may be customized and/or configured in a variety of manners. For instance, the height, width, thickness, shape, configuration, etc. of the vertical tube, the upper support **14**, the lower support **15**, the sign plate **18**, the base plate **19** and the grid wall **20** may vary from one embodiment of the self-standing merchandise frame **10** to the next without any limitation and/or restriction unless otherwise indicated in the following claims.

In addition, dependent on the specific application, the number of the vertical tubes may be increased or decreased to fit with different sizes of the grid wall **20**. Although not shown, in one embodiment, an extender arm **30** may be attached to the grid wall **20**, the vertical tube, the upper support **14**, or the lower support **15** or a combination thereof for the purpose of extending the size of the self-standing merchandise frame **10** without disassembling and or remodeling the entire embodiment.

Another feature of the present embodiment, as shown in FIGS. **4**A-**6**B, is the side panel **21**. As shown, FIG. **4**A is a side perspective view of a small side panel **21***a* in full extension positioned in the middle portion **20***a* of the grid wall as shown and disclosed herein. FIG. **4**B is a side perspective view of a small side panel **21***a* in full extension positioned in the upper portion **20***a* of the grid wall as shown and disclosed herein. FIG. **4**C is a side perspective view of a small side panel **21***a* in half extension positioned in the middle portion **20***b* of the grid wall as shown and disclosed herein. FIG. **4**D is a side perspective view of a small side panel **21***a* in half extension positioned in the upper portion **20***a* of the grid wall as shown and disclosed herein.

As shown in FIGS. **4**A-**4**D, the small side panel **21***a* is configured for attachment along the length of the grid wall **20**. The small side panel **21***a* may be attached and positioned along the length of the grid wall **20** via a screw, a bolt or a mounting bracket **16**. Due to the small size, the small side panel **21***a* (in full extension) may be attached to an upper portion **20***a* (see FIG. **4**B), a middle portion **20***b* (see FIG. **4**A) or a lower portion **20***c* (not shown) of the grid wall. In one embodiment, the small side panel **21***a* (in half extension) may be attached to an upper portion **20***a* (see FIG. **4**D), a middle portion **20***b* (see FIG. **4**C) or a lower portion **20***c* (not shown) of the grid wall. The small side panel **21***a* is designed for multiple purposes such as merchandise separation, decoration, advertisement, etc. The small side panel **21***a* is removable, light and adjustable which makes it easy to use, with transportation and storage convenient for the operator. One of ordinary skill will appreciate that the small side panel can be adjusted and be positioned along the length (vertical) of the grid wall. One of ordinary skill will also appreciate that the small side panel **21***a* can be adjusted and be positioned along the width (horizontal dimension) of the

grid wall **20**, without any limitation and/or restriction unless otherwise indicated in the following claims.

FIG. **5**A is a side perspective view of a medium side panel **21***b* in full extension positioned in the middle portion **20***a* of the grid wall of the merchandise frame **10** as shown and disclosed herein. FIG. **5**B is a side perspective view of a medium side panel **21***b* in full extension positioned in the upper portion **20***a* of the grid wall as shown and disclosed herein. FIG. **5**C is a side perspective view of a medium side panel **21***b* in half extension positioned in the lower portion **20***c* of the grid wall as shown and disclosed herein. FIG. **5**D is a side perspective view of a medium side panel **21***b* in half extension positioned in the upper portion **20***a* of the grid wall as shown and disclosed herein.

FIG. **6**A is a side perspective view of a large side panel **21***c* in full extension of the self-standing merchandise frame **10** as shown and disclosed herein. FIG. **6**B is a side perspective view of a large side panel **21***c* in half extension of the self-standing merchandise frame **10** as shown and disclosed herein. As shown in FIGS. **6**A-**6**B, the large side panel **21***c* is configured for attachment along the length of the grid wall **20** wherein the large side panel **21***c* is substantially similar with the length of the grid wall **20**. The large side panel **21***c* may be attached and positioned along the length of the grid wall **20** via a screw **4**, a bolt **5**, a hook **17** or a mounting bracket **6**. The large side panel **21***c* is designed for multiple purposes such as merchandise separation, decoration, advertisement, etc. The large side panel **21***c* is removable, light and adjustable which make it easy to use and convenient during transportation and storage. One of ordinary skill will appreciate that the large side panel **21***c* can be adjusted and be positioned along the length (vertical dimension) of the grid wall **20**. One of ordinary skill will also appreciate that the large side panel **21***c* can be adjusted and be positioned along the width (horizontal dimension) of the grid wall **20**, without any limitation and/or restriction unless otherwise indicated in the following claims.

FIG. **7** is a perspective view of a shelf **24** of the self-standing merchandise frame **10** as disclosed herein. As shown, the shelf **24** is configured to engage and attach to the front of the grid wall **20** via a mounting bracket **6**, a hook **17**, etc. without any limitation and/or restriction unless otherwise indicated in the following claims. The shelf **24** is used for merchandise display such as coffee, coffee maker, ATM, book, cup, ipad, electronic device, a microwave, coffee brewer, sales kiosk surface (see FIG. **9**A) without any limitation and/or restriction. The shelf **24** may be constructed of, but not limited to, a metal, such as steel, bronze and aluminum, or a combination therein, or some other solid, durable, hard material or a combination thereof.

FIG. **8** is a front perspective view of the self-standing merchandise frame **10** having a shelf **24** and a secure access box **25** as disclosed herein. FIG. **8**A is a back-perspective view of the self-standing merchandise frame **10** having a shelf **24** and a secure access box **25** as disclosed herein.

FIG. **8**B is a front view of the self-standing merchandise frame **10** having a shelf **24** and a secure access box **25** as disclosed herein. FIG. **8**C is a side view of the self-standing merchandise frame **10** having a shelf **24** and a secure access box **25** as disclosed herein. As shown, the secure access box **25** may be configured to store security devices wherein the secure access box **25** is only accessible from behind the grid wall **20** for enhanced security. The shelf **24** and the box may be constructed as one integral unit or separately and conventionally attached together without any limitation and/or restriction. The method of setting up the secure access box **25** comprises of two steps: attaching the shelf **24** to the grid wall **20** and attaching the secure access box **25** underneath the shelf **24** to the grid wall **20**. A DVR **26**, a DVD player, security devices, electronic devices may be placed inside the secure access box **25** wherein only the operator can access to the secure access box **25** from behind the grid wall **20** without any limitation and/or restriction unless otherwise indicated in the following claims.

FIG. **9** is a perspective view of the self-standing merchandise frame **10** displaying different products as disclosed herein. FIG. **9**A is a perspective view of the Self-standing merchandise frame **10** as disclosed in FIG. **9** wherein multiple side panels **21** for product separation have been added. Although the self-standing merchandise frame **10** is self-standing, it can be attached to a wall with an earthquake stability strap if desired or necessary. The self-standing merchandise frame **10** has many advantages such as light weight, simple, reusable and low manufacture cost.

This particular embodiment of a self-standing merchandise frame **10** has a sign plate **18** fabricated from aluminum using various laser cutting, welding, securement and machining technologies which are well known to those of ordinary skill in the art. One of ordinary skill will appreciate that the self-standing merchandise frame **10** could be constructed by any method known to those in the art including via casting, forging and machining or stamping and punching, without restriction or limitation.

One of ordinary skill will appreciate that other types of fasteners including screw, bolts and or pegs could be used without departure from the spirit and intent of the present disclosure, to allow for easy detachment or removal of the fastener during disassemble for packing or transportation.

One of ordinary skill will appreciate that the self-standing merchandise frame **10** provides a large space for merchandise display which allows multiple attachments of various types of merchandise units such as candies, chocolate, gums, etc. without any limitation and/or restriction unless otherwise indicated in the following claims. The sign plate **18** of the self-standing merchandise frame **10** (width of 24 inches), as compared to the sign plate **18** of the self-standing merchandise frame **10** (width of 48 inches and 96 inches), is wider and more space which is a great advantage for advertising and displaying merchandise label, easy to catch customer's attention and increases sale's profit.

Depending on the materials selected and purposes, the self-standing merchandise frame **10** may be designed of different shapes, sizes, and/or color without any limitation and/or restriction unless otherwise indicated in the following claims.

Another manufacturing aspect of another embodiment is cutting the tabs, hooks **17**, mounting bracket **16** out of a crosspiece and then welding it back to the embodiment. Depending on different application, the crosspiece may be substituted as a sheet of metal, copper, etc. without any limitation and/or restriction. One of ordinary skill will appreciate that self-standing merchandise frame **10** provides a simple, inexpensive structure to display products or merchandises such as snacks, candies, drinks, coffee marker etc. but not limited to camera, DVR **26**, without any limitation and restriction unless otherwise indicated in the following claims. One of ordinary skill will also appreciate that the embodiment could be quickly assembled and disassembled during packing or transportation which provides a unique featuring and signing which contributes to the dynamic merchandising system and store decoration.

Having described the preferred embodiments, other features of the self-standing merchandise frame **10** will undoubtedly occur to those versed in the art, as will numer-

ous modifications and alterations in the embodiments as illustrated herein, all of which may be achieved without departing from the spirit and scope of the self-standing merchandise frame **10** disclosed herein. Accordingly, the methods and embodiments pictured and described herein are for illustrative purposes only, and the scope of the present disclosure extends to all method and/or structures for providing increased functionality, longevity, suitability and convenience in the use and access of self-standing merchandise frame **10**. Furthermore, the methods and embodiments pictured and described herein are no way limiting to the scope of the self-standing merchandise frame **10** and method of use unless so stated in the following claims.

It should be noted that the self-standing merchandise frame **10** is not limited to the specific embodiments pictured and described herein but is intended to apply to all similar apparatuses and methods for providing the various benefits and/or features of a self-standing merchandise frame **10**. Modifications and alterations from the described embodiments will occur to those skilled in the art without departure from the spirit and scope of the self-standing merchandise frame **10**. It is understood that the self-standing merchandise frame **10** as disclosed herein extends to all alternative combinations of one or more of the individual features mentioned, evident from the text and/or drawings, and/or inherently disclosed. All of these different combinations constitute various alternative aspects of the self-standing merchandise frame **10** and/or components thereof. The embodiments described herein explain the best modes known for practicing the self-standing merchandise frame **10** and/or components thereof and will enable others skilled in the art to utilize the same. The claims are to be construed to include alternative embodiments to the extent permitted by the prior art.

It will be apparent to those skilled in the art that various modifications and variations can be made without departing from the scope or spirit. Other embodiments will be apparent to those skilled in the art from consideration of the specification and practice disclosed herein. It is intended that the specification and examples be considered as illustrative only, with a true scope and spirit being indicated by the following claims.

What is claimed is:

1. A self-standing merchandise frame comprising:

a) a first vertical tube having a first upper portion, a first middle portion and a first lower portion, the first middle portion having a first angled portion and a first upper curved radius transitioning to the first upper portion, the first upper portion transverse to the first middle portion, the first middle portion also having a first lower curved radius transitioning to the first lower portion, the first lower portion transverse to the first middle portion;

b) a second vertical tube having a second upper portion, a second middle portion and a second lower portion, the second middle portion having a second angled portion and a second upper curved radius transitioning to the second upper portion, the second upper portion transverse to the second middle portion, the second middle portion also having a second lower curved radius transitioning to the second lower portion, the second lower portion transverse to the second middle portion;

c) a third vertical tube having a third upper portion, a third middle portion and a third lower portion, the third middle portion having a third angled portion and a third upper curved radius transitioning to the third upper portion, the third upper portion transverse to the third middle portion, the third middle portion also having a third lower curved radius transitioning to the third lower portion, the third lower portion transverse to the third middle portion;

d) a base plate, the base plate is attached to and extends between the first lower portion, the second lower portion, and the third lower portion;

e) an upper support, the upper support is attached to and extends between the first vertical tube, the second vertical tube, and the third vertical tube; the upper support positioned proximate the first upper curved radius, the second upper curved radius, and the third upper curved radius, wherein the upper support comprises a first mounting support hook;

f) a lower support, the lower support is attached to and extends between the first vertical tube, the second vertical tube, and the third vertical tube; the lower support positioned proximate the first lower curved radius, the second lower curved radius, and the third lower curved radius; wherein the lower support comprises a second mounting support hook;

h) a grid wall having a front portion and a rear portion, the rear portion of the grid wall is configured be directly attached to the first mounting support hook of the upper support and the second mounting support hook of the lower support and extend between the upper support and the lower support;

i) at least one of a merchandise shelf, a merchandise rack, a merchandise basket, or a box, configured for engaging and attaching to the front portion of the grid wall.

2. The self-standing merchandise frame according to claim **1**, wherein the first angled portion and the second angled portion are each in the range of 100-360 degrees.

3. The self-standing merchandise frame according to claim **1**, wherein the first lower curved radius and the second lower curved radius are each in the range of 4-10 inches.

4. The self-standing merchandise frame according to claim **1**, wherein the first upper curved radius and the second upper curved radius is in the range of 4-10 inches.

5. The self-standing merchandise frame according to claim **1**, wherein the at least one merchandise shelf, merchandise rack, or merchandise basket has mounting hooks for attaching to the grid.

6. The self-standing merchandise frame according to claim **1**, wherein the at least one merchandise shelf, merchandise rack, merchandise basket, or box is attached to the front portion of the grid wall.

7. The self-standing merchandise frame according to claim **1**, wherein the at least one merchandise shelf, merchandise rack, merchandise basket, or box comprises a merchandise shelf with a secure access box positioned underneath the merchandise shelf.

8. The self-standing merchandise frame according to claim **7**, wherein the secure access box is only accessible from behind the grid wall for enhanced security.

9. The self-standing merchandise frame according to claim **1**, wherein at least one panel is attached to the grid wall and positioned along the length of the grid wall.

10. The self-standing merchandise frame according to claim **9**, wherein a dimension of the at least one panel is substantially similar to the length of the grid wall.

11. The self-standing merchandise frame according to claim **9**, wherein a height of the at least one panel is adjustable.

12. The self-standing merchandise frame according to claim **9**, wherein the at least one panel is configured to separate merchandise.

13. The self-standing merchandise frame according to claim **1**, further comprising

a sign plate, wherein the sign plate is configured to be mounted to the first

upper portion, the second upper portion, and the third upper portion and extend along a width of the merchandise frame.

14. The self-standing merchandise frame according to claim **1**, further comprising at least one panel, wherein the at least one panel is configured to engage and attach to the grid wall with the at least one panel extending along a length of the grid wall.

15. The self-standing merchandise frame according to claim **1** wherein the upper support is attached to the first vertical tube, the second vertical tube, and the third vertical tube via bolts inserted into and through the upper support and the first vertical tube, the second vertical tube and the third vertical tube respectively.

16. The self-standing merchandise frame according to claim **1**, wherein the lower support is attached to the first vertical tube, the second vertical tube, and the third vertical tube via bolts inserted into and through the lower support and the first vertical tube, the second vertical tube and the third vertical tube respectively.

17. The self-standing merchandise frame according to claim **1**, wherein the upper support is attached to the first vertical tube, the second vertical tube, and the third vertical tube via mounting brackets.

18. The self-standing merchandise frame according to claim **1**, wherein the lower support is attached to the first vertical tube, the second vertical tube, and the third vertical tube via mounting brackets.

* * * * *